



Facility Review

A report on the condition of facilities at
Missouri's public colleges and universities

December 2009





Introduction

Missouri Department of Higher Education (MDHE) staff visited each public college and university in the state during the summer of 2009. This report summarizes information collected during those visits and identifies three trends that affect all of the state's public institutions of higher education.

Statutory Background

Missouri law involves the Coordinating Board for Higher Education (CBHE) and its administrative arm, the MDHE, significantly in issues related to statewide planning for higher education. The CBHE's broad duties include designing a coordinated plan for higher education (§ 173.020(4), RSMo), reviewing each public institution of higher education's mission and its efforts to achieve that mission (§ 173.030(7), RSMo), developing guidelines for appropriation requests (§ 173.005.2(3), RSMo), and developing a unified budget request for the state's public colleges and universities (§§ 163.191, 173.005.2(2), 173.030(3), and 173.040(5), RSMo).

As indicated above, the CBHE also has specific duties related to campus facilities. Section 173.005.2(3), RSMo, requires the board to work with institutions of higher education to develop guidelines for appropriation requests based on "carefully collected data on enrollment, physical facilities, manpower needs, [and] institutional missions." Section 173.020, RSMo, requires the board to develop arrangements for "more effective coordination and mutual support among institutions in the utilization of facilities, faculty and other resources." Finally, sections 173.030(2) and (3), RSMo, enable the board to make recommendations related to physical facilities to institutions' governing boards.

History of Facility Review

MDHE staff have conducted facility reviews in the past, but the activity was discontinued after the department's budget and staff were cut during the economic downturn in the early 2000s. Previous facility reviews were somewhat informal and were not summarized in a written report.

2009 Facility Review Process

The Commissioner of Higher Education directed MDHE staff to visit each of the state's public colleges and universities during the summer of 2009. The purpose of these visits was to collect information about each campus, rebuild the department's first-hand knowledge of campus conditions, and develop a baseline on which future facility reviews will be based. Information collected during these visits will also provide context for revision of the CBHE's capital prioritization guidelines and will be used to build support for funding requests for maintenance and repair and capital improvements.

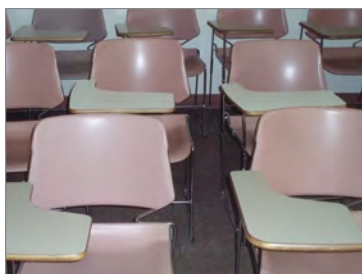
Conclusions

MDHE staff developed detailed reports about each campus they visited. They also reviewed each report and identified three trends that impact campuses across the state: problems providing the quantity and quality of space needed at many institutions, the poor condition of many science facilities, and the need for increased funding for maintenance and repair. Although the findings of the 2009 facility review process did not specifically inform the CBHE's statements about the FY 2011 budget, those statements are in alignment with the trends identified here. The board's prioritized capital improvements request includes many projects aimed at increasing institutions' capacity and at improving science facilities. The board has also endorsed a strategic initiative aimed at bringing attention to the need for increased maintenance and repair funding.

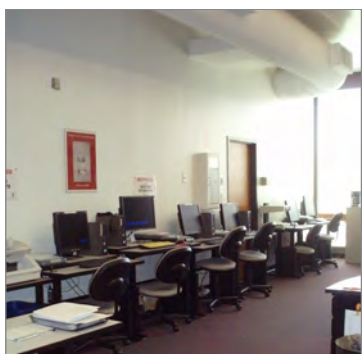
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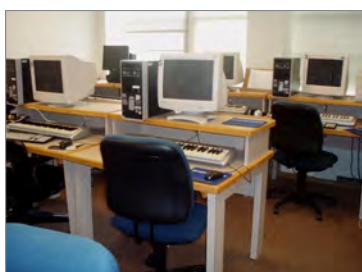
Challenges with Quantity & Quality of Space



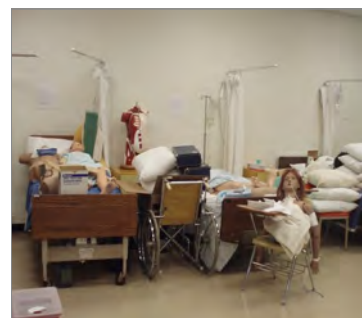
Desks crowded into a classroom to accommodate more students.



Space for student support services is often limited.



Music classrooms are not large enough to meet programmatic needs and student demand.



Nursing labs are often crowded.

Lack of adequate space is one of the most significant challenges faced by college and university administrators across the state. This is true in terms of *quantity* of space as well as *quality* of space.

Quantity of Space

Many of Missouri's public colleges and universities—especially community colleges—are struggling to accommodate dramatically increased student enrollment. Surges in enrollment require additional seats in classrooms, additional sections of classes, and additional space to accommodate the faculty members who are brought in to teach extra sections. Inability to expand means inability to accommodate student demand. Students may be unable to register for a required course because the class is already full, or may be put on a waiting list for a program because the program does not have enough space to accommodate additional students. More students on campus also leads to more traffic in student services areas, more users logged on to campus servers, and more students vying for parking spaces. The need to spend money on maintenance and repair increases as the movement of a larger student body results in more wear and tear on facilities.

Many of the students who are part of this enrollment surge need significant support to succeed in college. Most institutions are working to provide sufficient space to offer a growing number of students tutoring, testing services, and other kinds of academic assistance. This often involves carving space out of another facility such as the library.

Another challenge related to quantity of space is the fact that enrollment at some community colleges' off-site instructional facilities has skyrocketed in recent years. These off-campus sites offer educational opportunities to "place bound" students, many of whom would not have access to low-cost public higher education without the existence of the sites. In some cases, the college has been able to acquire additional space to accommodate these new students, but in other cases, the off-campus facility has simply grown more and more crowded.

In addition to overall increases in enrollment, many colleges and universities have challenges accommodating student demand in particular programs. Most institutions face unique challenges in this area, but there are some trends across the state. Nearly every institution is "at capacity" in nursing and/or allied health programs. Applicants for those programs are often put on long waiting lists, slowing the rate at which skilled employees enter one of Missouri's highest demand fields and delaying the positive economic impact getting a nursing or allied health degree would have on the students and their families. The state's only dental school is also operating at capacity, and needs to add square feet to accommodate additional students. Many institutions' business programs are facing increased enrollment, often making it difficult to find space for additional students and faculty. Finally, several institutions' music facilities are currently too small to meet student and faculty demand. At those institutions, students lack sufficient space to practice instruments and there is no room to offer instruction in newer areas such as electronic media and recording technology.

The state's public colleges and universities have used several different strategies to address the challenges associated with growing enrollments, including offering online classes, leasing instructional space, scheduling classrooms more heavily, and increasing night and weekend programs. Although each of these approaches provides some relief, they are not enough to completely "solve" institutions' space problems.

Most students who take online courses still use campus facilities. Many are enrolled in both online and traditional classes. Furthermore, many institutions prefer to offer blended courses that include both online and in-person instruction, based on research indicating that many students are most likely to succeed if there is some face-to-face interaction with professors and peers. Finally, even classes that are offered entirely online often require space on campus to house the instructor, broadcast equipment, and testing facilities.

The use of leased space has allowed schools to meet student demand in many areas – especially relatively remote areas in which there is no public higher education institution. This strategy, however, has potential drawbacks. First, it is not always reliable. The lessor may cancel the lease unexpectedly, forcing the school to scramble to find suitable space. Second, most schools that lease space must make significant investments to make the building useful for instruction, faculty offices, and other school functions. Schools are also generally responsible for upkeep of the building. The result is that institutional funds are spent to improve and maintain a building that the school does not own.

Scheduling a classroom for continuous use often helps meet growing student demand, but it is not a good solution in several situations. Many students prefer to take classes during the traditional school day – from mid-morning until mid-afternoon. On community college campuses, another large group of students prefer to take classes between late afternoon and evening. Many institutions have tried to offer classes during other time periods, only to find that student demand for those offerings was too low to make the approach cost-effective. In some programs, particularly vocational technical programs, scheduling multiple classes in one room per day simply isn't an option. Many such programs have classrooms that must be dedicated to one discipline because of the machinery and equipment needed for that discipline. Instruction in those programs may require students to spread materials out on work surfaces, then leave the materials out to work on again the next day. This makes the rooms unsuitable for use by another class. Science labs face similar problems: Significant time is required to prepare for and clean up after lab experiments, making it impossible to schedule a room back-to-back with no break.

Another challenge that makes scheduling difficult is the fact that classrooms are different sizes and shapes. Newer classroom buildings are designed for maximum flexibility, with furniture and room layout that make the room easily adapted for most kinds of instruction and allows students to move around for group work and other collaboration-based exercises. Most older classrooms, however are far less flexible. Room size is another difficulty. Most campuses have very few large lecture halls, which are constantly in use.



Delivery of distance learning courses requires classroom space on campus.



Institutions that lease classroom space may face unexpected lease termination and spend money to repair rented facilities.



Preparation time for laboratory classes is critical and limits use of the facility.



Some classrooms, like the one pictured above, have awkward layouts.



Safety features are outdated.



Access for students with disabilities is hindered by the stairs in the library.



Old theater seating is used as storage for the campus bookstore.



Many campus auditoriums are outdated and inadequate to serve students and the public.

When a class for which there is high student demand cannot be scheduled in a large lecture hall, it is usually offered in several smaller sections. This puts strain on smaller rooms and requires additional faculty assignments – in short, it is not the most efficient way to offer classes.

Finally, many institutions are having difficulty accommodating student, faculty, and staff demand for parking. This is especially true on campuses where enrollment has grown tremendously and where most students drive to campus. The construction of a new parking lot is a very expensive endeavor, and state funds are not available for such projects.

Quality of Space

In addition to the difficulties many institutions are having finding enough space to simply seat their students, most institutions have space that is of inadequate quality to make it well-suited for its current use. Some institutions have space that is in such a state of disrepair that it cannot be used at all. Several institutions have facilities that have been noted as deficient by accrediting agencies. Almost every institution has buildings with more general problems, including lack of life safety equipment such as sprinklers, alarm panels, and appropriate routes of egress. Another general problem is the fact that many campus buildings only meet minimal ADA requirements. Examples include buildings where students who use wheelchairs only have one, difficult-to-access way to enter and exit the building; are unable to access parts of essential facilities such as libraries and classrooms; and are forced to use awkward, make-do arrangements to open and close doors.

Many campuses are using buildings for purposes other than what the building was originally designed to accommodate. Examples include using former dormitories for exam rooms, using a building constructed for vocational technical education for general classrooms, and using frame houses around campus for offices. In addition, some schools use what used to be closets or storage areas as faculty offices or research labs, or have partitioned faculty offices to accommodate two or three faculty members or other teaching staff. This often creates difficulty because the new spaces are not properly ducted for HVAC and do not have enough electrical supply or outlets.

Lack of facilities to offer instruction in new fields is another problem. Programs like green automotive technology cannot be offered in existing automotive technology classrooms. Enrollment in the existing programs is already high, and the space and equipment needed for students to learn this new skill are different from what was needed for the old program.

Finally, many schools have auditoriums that are used for large campus events and events open to the general public that offer students unique educational opportunities. At many institutions, these facilities are badly in need of renovation. Many are difficult to access for people who use wheelchairs, and many have stages that do not meet the needs of the kinds of events that attract public interest. Many are simply outdated and need better, larger seats.

Failing Science Facilities

Many of the science labs, lecture halls, and research facilities at Missouri's public colleges and universities are in desperate need of renovation or replacement. Often these facilities are outdated and not configured or equipped for modern teaching and research methods. In many cases, facilities problems create potential safety hazards. In still other cases, the facilities are too small to accommodate the number of students taking classes.

Many of the science buildings in use on public college and university campuses today were constructed in the 1960s, shortly after Sputnik focused the country's attention on the need to train more scientists and during an era of rapid campus expansion. Most facilities have undergone some renovation since they were constructed, but many of the renovations have been relatively minor. A few schools still have "original" labs – space that has not been significantly updated for 40-50 years. These aging facilities are often of lower quality than the science classrooms and labs at area high schools, and are worlds behind the environments science majors will be expected to operate in when they enter the workforce.

Outmoded Approaches, Equipment, and Support Systems

New science labs are designed to foster the kinds of skills students will need when they enter the workforce, and to offer instruction in a technologically enriched environment that maximizes student learning and engagement. These new labs provide flexible space that can be reconfigured to accommodate assignments designed to encourage collaboration, or that can be used for multiple disciplines. They also have computers at lab stations and audiovisual technology that allows faculty members to perform demonstrations that can be viewed easily by the entire class.

Unfortunately, most labs at Missouri's public colleges and universities lack the features described above. Instead, they reflect teaching and research methods that were common at the time they were built. They were constructed in a way that makes collaborative learning very difficult, and most can be used only for one discipline. Lab work stations do not have space for computers, and the rooms were not designed to accommodate teaching technologies. The fact that lab furniture tends to be large and fixed to the floor may also make lab space inaccessible or difficult to access for students and faculty members who use wheelchairs.

In addition, many science buildings have layouts that reflect outmoded ideas about the relationship of teaching and research. In some buildings, for example, faculty members' research labs are in their offices. While this may have been common decades ago, it does not allow for some of the approaches emphasized by modern science programs, such as hands-on and applied learning. The spaces are often too small to allow students to assist in the research, and students can have access to projects only when faculty members are in their offices. On other campuses, faculty offices are too separate from the areas where students congregate, limiting student-faculty interaction. Finally, many buildings lack space that fosters interdisciplinary research.



Laboratory surfaces are corroded, stained, and rusted.



Dated light fixtures are rusting.



Modern technology is difficult to incorporate in outdated labs.



Furniture is bulky and permanently stationary.



Outdated ventilation system in a campus lab.



Older labs simply weren't built with today's electrical needs in mind.



Dated laboratories prevent clear sightlines to students working.



Faculty offices are crowded with research materials.

Outdated equipment is another challenge facing the state's higher education science programs. Some colleges and universities are using decades-old microscopes and other equipment. Many schools rely on hand-me-downs from businesses to equip their labs, and these donations are often several generations behind what the private sector is using.

Finally, several schools have problems with the systems that support their science lab spaces. Older buildings were not constructed to handle the electrical load required to operate modern scientific equipment. At least one institution has received donated equipment that they cannot use because the electrical system in the building will not support it. In other situations, the ventilation system in the building does not adequately vent fumes.

Safety

Most of the state's older labs show their age in the form of corroded counters and floors, rusted and broken fixtures, and overloaded electrical outlets. These deficiencies are not just cosmetic flaws — in some cases, they may represent safety issues. Uneven floors and countertops increase the risk of spills. Broken fixtures may leak water or gas. Electrical outlets into which people have plugged multiple extension cords represent an obvious safety hazard, but lab users have little choice. When the labs were constructed, they simply didn't need to have as many electrical outlets as labs do today. Equipment has increased in terms of number (more students in labs mean more equipment being used) and in terms of kind (many new pieces of equipment have been developed in the last half century, some of which is now standard in many labs). Most of this equipment needs electricity to operate.

Other problems also create safety risks. As enrollments have grown, science labs have become more crowded. In some labs, faculty members do not have clear sightlines to all workstations, compromising their ability to properly supervise students using dangerous chemicals and other potentially hazardous substances. Many science facilities have chemical storage areas that are crowded and not locked. In addition, many schools' science labs do not have functional or up-to-date chemical showers, operational sprinkler systems, or easily accessible routes of egress. Finally, many schools' science labs have outdated and/or poorly constructed fume hoods.

Growing Enrollments

At the heart of many of the safety issues noted above is the fact that today's facilities are used by a great many more students than they were originally constructed to accommodate. Enrollment at all institutions has increased over the years. This means that more students — science majors and non-majors taking general education classes — use classrooms and lab spaces. This results in increased competition for seats in some courses, most commonly lower-level general education classes and service classes that are prerequisites for health and other science-based programs. In some cases, students' academic progress may be delayed by their inability to get into a required class.

Another corollary of enrollment growth is the need for more faculty. At many institutions, as faculty numbers have grown, the number of offices and research labs has not. This may lead to faculty members sharing offices, using former closets and storage areas for research and offices, or simply not having an office on campus. In the end, inadequate faculty office and research space makes it more difficult for students to interact with faculty advisors and mentors and for students and faculty members to engage in research.

Increasingly Serious Maintenance & Repair Needs

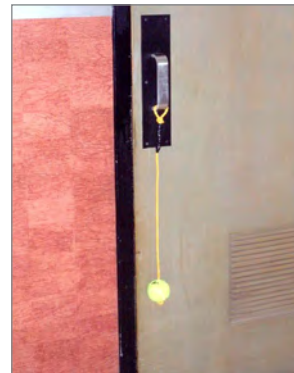
Every public college and university in the state has a substantial backlog of deferred maintenance – projects that have been put off because funds are not available to complete them. Higher education industry standards indicate that institutions should spend approximately 1.5% of the total replacement value of their physical plant on maintenance and repair each year. That goal is currently unattainable for the state's public colleges and universities. The result is that the condition of many of the state's higher education facilities is bad – and getting worse every year.

Expenses generally considered “maintenance and repair” include equipment purchases and repairs, furniture purchases and repairs, maintenance contracts, carpeting and flooring, paint, electrical work, plumbing, repaving parking lots, sidewalks, ADA improvements, and elevator maintenance, as well as salaries for maintenance employees who provide these services.

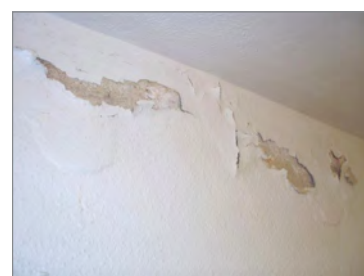
Lack of consistent increases in state funding has put a strain on institutions' maintenance and repair budgets. This has resulted in pervasive problems in many campus buildings, such as cracked and peeling paint, water-damaged ceilings and walls, buckling floor tiles, aging plumbing and electrical systems, elevators that no longer meet code, and inefficient HVAC systems. It also means that many buildings are minimally ADA compliant, and are very difficult for students, faculty, and staff who have disabilities to access. Many buildings' facades need to be tuckpointed, sealed, and simply painted. Several institutions' roofs need to be repaired. The results of deferred maintenance are also clearly visible in outdoor areas: Parking lots are in need of resurfacing and sidewalks are cracked.

These issues are not just cosmetic. Many of the problems noted above are indicative of serious problems such as water infiltration through exterior walls, windows, and roofs. These problems worsen every year unless corrective action is taken. Other problems make buildings highly inefficient from an energy use standpoint. Examples include outdated windows, HVAC systems, and roofs. Still other problems represent disasters-in-the-making. Old plumbing, roofs, and electrical and HVAC systems will disrupt campus activity significantly when they fail. Each of these systems is expensive to repair in the short run – but vastly more expensive to replace or to repair after additional years without regular maintenance. Finally, some of the problems resulting from deferred maintenance have a negative impact on safety. Overloaded electrical systems, aging boilers, elevators that do not meet code requirements, and compromised brick facades are all examples of problems that jeopardize the safety of those on campus.

Many of the campus facilities most negatively impacted by deferred maintenance are some of Missouri's most iconic buildings. Historic buildings on campuses across the state are threatened by the kinds of deficiencies described above. In a few cases, the problems with a building have become so severe that large parts of the building cannot be used for any purpose other than storage.



A tennis ball on a cord serves as ADA compliance for restroom access.



Large sections of paint peel from the walls.



Sizeable portions of floor tile are missing.



Cement stairs leading to a historic building are deteriorating.

HARRIS-STOWE STATE UNIVERSITY



Administration Building

Harris-Stowe serves the higher education needs of the metropolitan St. Louis region. It is also thoroughly committed to meeting to the greatest extent possible the needs of a student population that is diverse in age, culture, ethnicity, and experiential backgrounds. In short, Harris-Stowe is strongly committed to providing a high-quality higher education experience that is both affordable and accessible to the diverse populations within and beyond the metropolitan St. Louis region.

Harris-Stowe is an open enrollment university located in the City of St. Louis. About 1,800 students attend Harris-Stowe. All are undergraduates.

Facility Challenges

Harris-Stowe has several high-quality new buildings, including a state-of-the-art early childhood development and parent education center, residence hall, library, and performing arts center. Each of these buildings enhances Harris-Stowe's ability to accomplish its mission. These buildings were constructed with a variety of funds, including state and federal appropriations, bonds, and private donations.

Many classes at Harris-Stowe are, however, delivered in buildings that have serious deficiencies. One example is the Dr. Henry Givens Jr. Administration Building (commonly known as the Administration Building). This historic building has pervasive problems that may have a



The roof of the Administration Building allows water inside.



The Administration greenhouse lab has been severely damaged by water infiltration.

negative impact on the educational programs delivered in the building. The Administration Building, which is the hub of the Harris-Stowe campus, is almost 100 years old. It is the university's primary instructional facility, providing space for 80% of classes offered by the institution. The building is also an important piece of St. Louis history, having initially served as Vashon High School. The Administration Building shows its age: Its roofs and boiler are in desperate need of replacement or repair, and the failure of either would result in massive disruption of classes and administrative services, and in significant unbudgeted expense. In addition, the Administration Building has a number of other problems that impact instruction and the instructional environment, including seriously outdated science labs, greenhouse-style lab space that cannot be used because of leaks, peeling paint caused by water infiltration, cracked and buckling floors, and ceilings damaged by leaks or burst pipes. Some of these problems, such as outdated science labs served by decades-old fume hoods, create potential safety hazards.

Other campus buildings also have physical problems that negatively impact the learning environment. The Anheuser-Busch School of Business (commonly referred to as the South Campus) has a leaking roof and rusted gutters that cause damage to sidewalks and courtyards, as well as a heating and cooling system that does not properly regulate the building's temperature. The building also has rooms that are laid out in a manner that is not conducive to instruction, and the parking lot that serves the building is far too small to meet student need. The relatively new Emerson Performing Arts Center has leaks that have caused significant indoor flooding, and cracks are developing in the building's walls.



The walls and ceiling are cracked and leaking in the South Campus building.

Facility Challenges, *continued*

Finally, Harris-Stowe staff indicate that it is difficult to find space to accommodate their growing student body. One of the institution's goals is to increase student retention and persistence, which university officials hope will result in enrollment increases in upper-division classes. One consequence of this increase will be increased competition for classroom space.

Capital Priorities

Harris-Stowe has a campus expansion committee that brings together representatives of different areas of campus. The committee prioritizes projects based on projected needs associated with anticipated enrollment, such as classroom space, campus safety, and programming directives. A schedule of project costs and priorities is submitted to senior-level staff and considered by the university's board of regents. The approved prioritized projects and related cost are submitted for final approval by the president and submitted to MDHE. The following items represent Harris-Stowe's top capital priorities for the future. The projects total about \$24 million.

1 • Renovation, Restoration, and Expansion of the Former Vashon Community Center

Request from state \$15,793,445

University funds +\$1,000,000

Total cost \$16,793,445

Harris-Stowe acquired the former Vashon Community Center (VCC) from the City of St. Louis in 1999. The building has historical and cultural significance for the St. Louis area and is on the National Register of Historic Places. For many years, the building has been used only for storage and is in desperate need of major repairs.

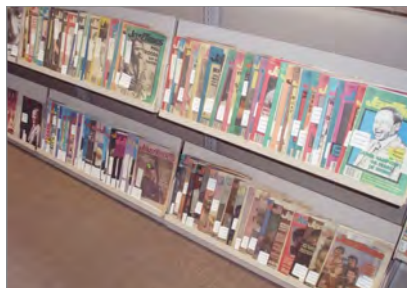
Harris-Stowe officials plan to renovate and expand the VCC to house four programs/projects, including a jazz institute, which would provide improved access to the university's collection of jazz memorabilia and materials; a repository of historical documents pertaining to the civil rights movement in St. Louis; a small art museum, which would house paintings, sculptures, and art objects that have been donated to the university; and a professional development center for excellence in homeland security. The project would be constructed in accord with the U.S. Green Building Council's LEED Certification Standards.



Windows are broken and paint is peeling from doors in the former Vashon Community Center.



In its current condition, the former Vashon Community Center can only be used for storage.



Periodicals are part of the university's jazz collection.



The university's Wolff Jazz Institute, currently housed in the Administration Building, was established in 2002 through a private donation from Donald and Heide Wolff.

Capital Priorities, *continued*

2 • Outdoor Enhancements

*Project cost: \$2,855,058
(total request from state)*

Harris-Stowe officials plan to improve several of the institution's outdoor spaces to enhance the campus' security and appearance, and to allow it to offer additional programs, classes, and community outreach programs. This request has four components, including construction of a permanent fence at the campus' perimeter, which would improve the security and appearance of a highly visible part of campus; construction of a softball field and support facilities, which would be used by the women's softball team, physical education classes, and community youth outreach programs; addition of lights on and near campus athletic fields, which would improve security; and repaving the South Campus parking lot and adding lights to improve security.

3 • Expanding and Improving Science Facilities

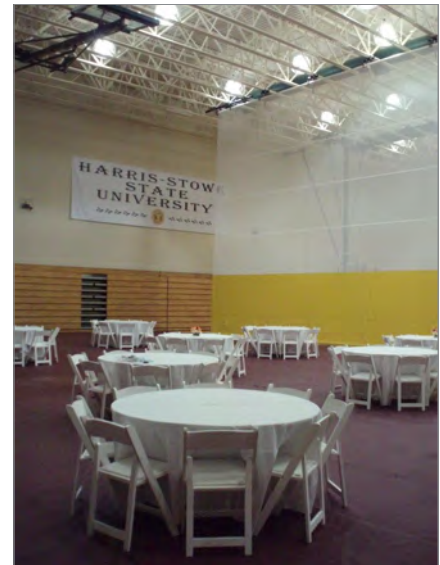
*Project cost: \$4,744,150
(total request from state)*

This project would include the complete renovation of five science labs and the conversion of two storage facilities into lecture halls. As discussed above, Harris-Stowe's labs are in great need of repair. The labs that would be included in this renovation are almost 80 years old and have never been extensively renovated. Most of the original equipment, such as ventilation hoods and chemical storage facilities, are original to the building – which was constructed in 1925. Renovation of lab space is expensive – Harris-Stowe estimates that it will cost approximately \$350 per square foot, for a total of about \$2.3 million.

This project would also involve the conversion of two existing storage spaces into lecture halls for use by the science department. Harris-Stowe currently only has one lecture hall on campus, and it is shared by all departments. These two additional lecture facilities would be dedicated to serving the needs of the newly created biology major.



SBC Library.



Emerson Performing Arts Center gymnasium set for an address from the President.

LINCOLN UNIVERSITY



Monument to Lincoln's founders.

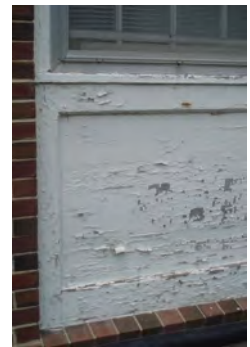
Lincoln University of Missouri is a historically black, 1890 land-grant, public, comprehensive institution that provides excellent educational opportunities including theoretical and applied learning experiences to a diverse population within a nurturing, student-centered environment.

Lincoln University is located in Jefferson City. It is an open enrollment institution that offers bachelor's degrees and select master's degrees. About 3,300 students currently attend Lincoln; about 94% of those students are undergraduates.

Facility Challenges

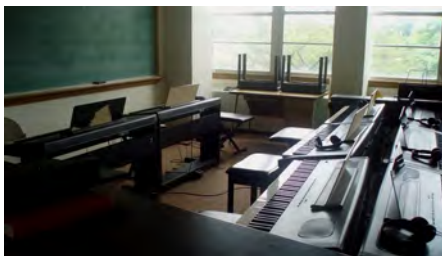
Lincoln's campus is distinctive and historic, with many buildings listed on the National Register of Historic Places. At the heart of the campus is a monument paying tribute to the institution's founders, and the university features a new residence hall, newly renovated classrooms and practice space for exercise sport physiology classes, and other new or newly renovated spaces. These buildings were constructed with a variety of funds, including state and federal appropriations, bonds, and private donations.

The majority of Lincoln's buildings are, however, aging. Many were built during the 1920s and 1930s, or between the late 1950s and early 1970s. The university has struggled to maintain these buildings, but most show evidence of the fact that the university has been unable to allocate funds for maintenance and repair on a consistent basis. In addition, many of the university's buildings are not ideally suited for their current use. Many of the systems that support the campus, such as the steam distribution system; life safety systems; roofs; and electrical, plumbing, and heating/cooling systems, are severely challenged. The likelihood that one of these systems will fail, resulting in major disruption and expense, increases every year.



Paint peels off the exterior of Mitchell Hall, home of Lincoln's band program.

Lincoln has other problems resulting from deferred maintenance. Many buildings have chipped, flaking, or otherwise compromised paint. In many cases, this damage is indicative of water infiltration or structural damage. The ceilings in many buildings are water-stained or have holes in them, suggesting that the pipes above leak or have burst. The mechanical systems are old and obsolete. It is difficult to find replacement parts for many HVAC units and electrical panels and devices. Most buildings have brick masonry veneer that has not been tuckpointed, cleaned, and sealed/waterproofed in years, causing water infiltration and risk of bricks falling. The steam distribution system is inefficient because of major leaks caused by rusted piping, broken valves, and tunnel structural issues.



Crowded music classroom.

Lincoln appears to use every available square foot of space on its campus. Unfortunately, this means that many programs are housed in buildings that are not well-suited for their current use and are in need of significant renovation or repair. In some cases, this has resulted in deficiencies noted by programmatic accreditation agencies. The National Association of Schools of Music, for example, cited Lincoln's band program as in desperate need of appropriate practice space. Another example is Elliff Hall, which a certifying agency cited as having deficiencies that undermine the mission of the nursing program. The

strategy of maximizing the use of space across campus also means that faculty and students in some departments are housed in different buildings, making it more difficult for colleagues to collaborate.

Lincoln lacks adequate space for some critical programs and its general education courses, both in terms of quality of space and quantity of space. Founders Hall, the building that houses most of the university's science classrooms and labs, and Elliff Hall, which houses the university's nursing program, do not have enough classrooms to accommodate student demand. The department of life and physical sciences is currently housed in Founders Hall.

Facility Challenges, *continued*

Previously, the department's focus was purely academic. All faculty maintained full teaching loads and participated in research in a relatively limited way. In the last 10 years, this department's focus has shifted to emphasize faculty-mentored undergraduate research, which provides students with valuable skills and experiences. Because the labs in Founders Hall are outdated, and the building's electrical system is insufficient to support some of the high-power scientific equipment needed to conduct research and teach students, research opportunities cannot expand. Lack of classroom and faculty office space in Elliff Hall limits in the number of nursing students the university can accept. There is a waiting list with an average timetable of two years for students to enter the program. Finally, the university needs more classrooms for lower-level general education courses. The university plans to address this through the construction of a new academic building, which is discussed in more detail later in this report.



Science labs on campus are dated and overcrowded.

Capital Priorities

Lincoln prioritizes its capital needs according to its campus master plan. The master plan sets forth a flexible strategy for meeting the university's long-term needs. Based on that strategy, Lincoln has identified the following projects as its top three priorities for the future. The projects total about \$59 million.

1 • New Science Building

Request from state \$32,653,830

University funds + \$1,718,622

Total cost \$34,372,452

A new science building would improve the quality of Lincoln's science instruction space, enable more students to participate in ongoing research projects, and allow the university to use classrooms and personnel more efficiently. Because all undergraduate, degree-seeking students at Lincoln are required to take general education science classes and participate in one lab, the new building would impact most of the students on campus. It would have a particularly significant impact on science majors and faculty, as well as on nursing and agriculture students, who take many of their introductory classes in the general science building.

The new science building would house the biology, chemistry, and physics departments, which are currently located in Founders Hall. Founders Hall also contains classrooms used by many other departments, and the lecture rooms are generally booked solid throughout the day. There is often more demand for large lecture rooms than can be accommodated, and the result is that classes may be offered in smaller, less efficient settings. Some small classes are taught by adjunct faculty, who do not have space to meet with students or to prepare for lectures. Limited space means that Founders Hall cannot provide the kind of environment needed to offer high-quality undergraduate research opportunities; currently, research is conducted in converted storage space and darkrooms, preparatory areas, and other "make-do" arrangements. Finally, the electrical system in Founders Hall is at capacity, making it impossible to add equipment essential for more teaching labs and student research.



Faculty office space is limited in Founders Hall.

The new building would be 120,000 square feet and would house state-of-the-art science teaching, lab, and research space. It would increase the number of students who can participate in ongoing research opportunities and would enable faculty to develop new programs. Founders Hall would continue to be used for other programs. The project would be constructed in accord with the U.S. Green Building Council's LEED Certification Standards, with a goal of achieving at least silver certification.

Capital Priorities, *continued*

2 • New Academic Building

<i>Request from state</i>	<i>\$16,714,430</i>
<i>University funds</i>	<i>+ \$879,707</i>
<i>Total cost</i>	<i>\$17,594,137</i>

Lincoln needs additional classrooms in which to offer general education classes. The number of rooms available for instruction has declined over the years as classroom space has been converted to computer labs, offices, and other non-instructional space. Because all undergraduate students are required to take general education classes, this project would impact almost every student on campus. The new building would also include faculty space; the building currently used for general education classes has no office space available for new faculty. The new building would provide an additional 60,000 square feet. It would be constructed in accord with the U.S. Green Building Council's LEED Certification Standards, with a goal of achieving at least silver certification.

3 • Jason Hall South Expansion

<i>Request from state</i>	<i>\$7,105,239</i>
<i>University funds</i>	<i>+ \$373,960</i>
<i>Total cost</i>	<i>\$7,479,199</i>

This expansion would provide classroom space for research in areas such as the prevention of cardiovascular disease, diabetes, and other minority health-related issues. It would also enhance the university's physical education program by adding a large multipurpose room to support academic classes. The expansion would be at the south end of Jason Hall, necessitating the relocation of the existing maintenance facility. The expansion would add approximately 20,000 square feet.



Lincoln's gymnasium.



Founders Hall, built in 1968, contains dated features.

MISSOURI SOUTHERN STATE UNIVERSITY



The horseshoe is the main path through campus.

Missouri Southern State University is a state-supported, comprehensive university offering programs leading to the bachelor's degree and to selective master's degrees in collaboration with other universities. The university has a statewide mission in international education granted to MSSU by special legislation.

Missouri Southern is located in Joplin. It is a moderately selective institution that focuses primarily on undergraduate education, offering bachelor's degrees and a limited number of associate degrees. The university also offers several master's degree programs in collaboration with other public universities in the state. About 5,700 students are enrolled at Southern; the vast majority are enrolled in undergraduate programs.

Facility Challenges

Southern has built or renovated several buildings in the last decade, including a new health sciences building and several buildings that support the institution's focus on enhanced student life. Most of Southern's major buildings, however, were constructed in the late 1960s or the 1970s. Although many of the buildings have been renovated since they were built, they are showing their age. The tile floors in several buildings are cracked and worn. Space in some buildings is not ideally configured; one clear example of this is the Fine Arts Complex, which includes features such as classrooms that can only be reached by passing through another classroom and a theater used for large public events but served only by a very small restroom. Another example is Hearnese Hall, which houses administrative and student services offices as well as classrooms. Interior walls have been added and moved, but Southern has not been able to move HVAC vents or update wiring to align with the new arrangement. The result is that the building is difficult to heat and cool and the electrical system is severely strained.



Floor tiles are cracking and peeling in Reynolds Hall.



Safety features in science laboratories are outdated.

A few buildings stand out as particularly in need of upgrades. Reynolds Hall is used largely for math and science instruction. Most of the science labs in Reynolds Hall have undergone relatively minor renovations since the building was constructed in 1967, and they show evidence of 40 years of wear and tear. Tabletops and floors are corroded. Storage space is cramped, and safety features such as chemical showers, fire alarms, and sprinklers have not been updated recently. Another building that stands out as in need of attention is the Taylor Performing Arts Center. The center's stage is outdated, and its orchestra box must be manually constructed and taken down each time the stage's configuration changes. The stage's curtains are no longer fireproof, and the theater's overall appearance is dated. Finally, the facility is not fully ADA compliant.

Facility Challenges, *continued*

In addition, some of the systems that support the campus are over 40 years old and threatening to fail. An example of such a system is the aging boiler system currently housed in the library basement. Other systems challenges include life safety systems such as fire alarms and sprinklers, plumbing, and the fiber network. Finally, many of the campus' roofs and elevators are aging and in need of replacement.



Support systems are old and inefficient.

Capital Priorities

Missouri Southern officials set capital priorities based on a long-range facilities master planning process. The most recent formalized plan, which was prepared in cooperation with an external architecture, design, and planning consultant, established a vision for FYs 2000 to 2005. Since this time, university officials have annually reviewed the capital needs of the university to determine which needs have the highest priority. Through that process, MSSU has identified the following as the institution's capital priorities for the future. These projects total about \$45 million.

1 • Reynolds Hall Renovation

*Project cost: \$29,000,000
(total request from state)*

Reynolds Hall houses the university's math, physical science and biology, and environmental health departments. As discussed above, quality of space is a problem because the lab facilities in Reynolds Hall have serious deficiencies. Quantity of space is also a problem. Much of the coursework offered in Reynolds Hall is in high demand because it provides prerequisites to nursing and allied health students or is part of a major with a large number of students. Southern proposes to renovate the existing 63,000 square feet and to add 36,000 square feet.



Floor tiles in the lab are stained and damaged.



Chemistry labs are outdated.



Lab hoods are rusted, corroded, and due to be replaced.

Capital Priorities, *continued*

2 • Hearn Hall Renovation

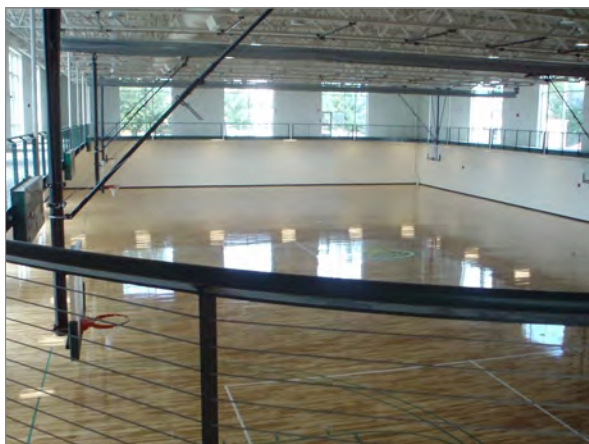
*Project cost: \$15,000,000
(total request from state)*

Currently, student support and administrative offices are scattered throughout the Missouri Southern campus. Southern administrators want to centralize these offices to increase efficiencies and make student services more accessible. They hope to create a one-stop service center, which would allow incoming freshmen and current students to conveniently access services in the admissions, financial aid, veterans affairs, counseling, career placement, registrar's, business, and international recruiting offices, as well as the learning center.

3 • Campus Safety

*Project cost: \$890,000
(total request from state)*

In order to access the main campus at Southern, students who park in one parking lot or who come to campus from athletic playing fields must cross a very busy road. Students have been injured when they were struck by cars as they crossed the road. Southern staff are asking for money to improve the safety of this crossing by installing a campus crosswalk. They would also like to add security cameras and access controls.



New recreation center gymnasium.



Bookstore in the new campus recreation center.

MISSOURI STATE UNIVERSITY



Historic Carrington Hall.

Missouri State University is a public, comprehensive university system with a mission in public affairs, whose purpose is to develop educated persons while achieving five goals: democratizing society, incubating new ideas, imagining Missouri's future, and modeling ethical and effective behavior.

Missouri State University (MSU) is located in Springfield. It is a selective institution that offers bachelor's, master's, and doctoral degrees, as well as specialist and other graduate-level programs. It is the second-largest public university in Missouri, with more than 20,000 students. About 84% of those students are undergraduates.

Missouri State also has a campus in West Plains and an agricultural research campus in Mountain Grove.

Facility Challenges

The condition of buildings on Missouri State's Springfield campus ranges from excellent to dated to in serious need of repair. The campus' outstanding buildings include Strong Hall, which supports the university's public affairs mission; the relatively newly renovated library and addition; and Sicheluff Hall, which was renovated and reopened in fall 2009. The renovated hall maintained many of the building's historical details, while at the same time greatly enhancing faculty members' and students' ability to use technology in the building.

Another of MSU's outstanding facilities is the Brick City development, which consists of several renovated warehouses in downtown Springfield that are or will be leased. This development will enhance the educational environment of the university's art and design department. Brick City is part of an overall strategy to extend the campus into downtown Springfield, to the benefit of both the university and the community.



McDonald Hall seating is damaged and in need of replacement.



The ceiling and wall in Craig Hall show signs of water infiltration.

Many campus buildings, however, are simply aging in a way that has a negative impact on the learning environment. In some cases the negative impact results from deteriorated conditions in the building. One example of this is McDonald Arena, which was built in 1940. The building shows considerable wear and tear. In addition, McDonald has been damaged by water infiltration. Another example is Craig Hall, which has several of the campus' oldest classrooms. The classrooms are dated and dark, and they do not have the same level of technology as do other classrooms on campus.

Facility Challenges, *continued*

Another type of facility challenge faced on MSU's Springfield campus is the fact that many older buildings are no longer well-suited for the programs offered in them. Craig Hall, for example, features a stage that no longer fully meets the needs of the theater department. Several of the campus' older buildings are not equipped with the number of electrical outlets and internet ports needed to meet student and faculty demand. Finally, Missouri State's science facilities need to be updated to meet modern teaching and research standards. Most of the university's science labs and classroom space have not been renovated for years. The most significant problems are dated lab work areas and highly inefficient antiquated lab fume hoods that require conditioned air to flow constantly to ensure that undesirable pollutants are properly controlled.



The stage in Craig Hall no longer meets the needs of the theater department.



Laboratory fume hoods are corroded and highly inefficient.

The systems that support the campus are also aging. Several of the campus' older buildings have support systems that need to be updated to meet current life safety standards and heating and cooling requirements. Some buildings also have support systems that undermine the quality of the academic experience in the building's classrooms, such as noisy air handling systems that make it difficult for students to hear their instructors and electrical systems that are insufficient to support equipment needed for research and instruction. The two-pipe heating and cooling systems in the older buildings make it difficult to heat and cool the buildings during spring and fall. The domestic water systems in some of the older buildings are inadequate due to many years of mineral buildup in the pipes, reducing throughput and degrading water quality.

In addition to problems with the quality of some space, several of Missouri State's key programs are hampered by insufficient quantity of academic space. Capacity is a particularly acute problem in health programs, as well as in science, business, and education programs. The university also has too few large lecture halls to seat 100-150 students; in many of the school's older buildings, the largest classrooms only hold 30 students. This forces MSU administrators to schedule multiple smaller sections of the same class, resulting in increased cost and even greater demand on classroom space.

MISSOURI STATE UNIVERSITY—WEST PLAINS



Looney Hall.

Missouri State University—West Plains is a teaching and learning institution providing quality post-secondary educational opportunities to the communities we serve.

The West Plains campus is a two-year, open admission institution that is a separately accredited campus of the Missouri State University System. Over 2,100 students are enrolled in part-time and full-time studies.

Facility Challenges

The quality of buildings on the Missouri State University—West Plains (MSU-WP) campus varies widely. Several facilities are relatively new and well-suited to their current use, but others are older and showing their age in a way that negatively impacts the programs offered in those buildings.

Enrollment at MSU-WP has doubled during the last 10 years, and finding space to accommodate these new students is a challenge. During this time of rapid enrollment growth, MSU-WP has not received a state appropriation that resulted in a completed capital project. In addition, several programs at MSU-WP lack sufficient space to meet student demand and workforce needs. The nursing program is the clearest example of this problem. The program is housed in an addition to the campus' oldest building, Kellett Hall. The program needs more space, and it also needs more modern equipment. It lacks some basic pieces of equipment, such as a simulator dummy to provide hands-on learning for nursing students. Space is also a problem in MSU-WP's library, which houses traditional library functions as well as the campus' student advising and academic support services. The area dedicated to student advising and academic support is too small to meet student demand, making it difficult for students to access the services they need.



Paint peels from the wall in Looney Hall.

MSU-WP has acquired several buildings that cannot be used for classroom instruction or student support until significant renovations occur. Examples include Broadway Hall, which is currently used as storage and shop space. The campus' long-range plan calls for the building to house the school's growing allied health program. Additional examples include facilities that have been donated to the school that will house student support programs and classrooms in which bachelor's and master's degree programs from the main campus in Springfield could be offered. Unfortunately, the facilities cannot currently be used for these purposes unless they undergo major renovations.

Another major challenge on campus is water infiltration, which has negatively impacted several buildings. In Looney Hall, for example, the building's envelope is damaged, allowing water to enter the building through walls and window frames. The result is crumbling interior walls and other damage. Water infiltration is also a problem in the Lybber Enhanced Technology Center, where water sometimes floods parts of the basement. Affected areas of the building include the data center for the West Plains campus. One of the most dramatic examples of damage caused by water is in the cafeteria/student center, where a leaking roof severely damaged the ceiling, walls, and floor.

Finally, many of the systems that support the operation of the MSU-WP campus are aging and in need of replacement. Several of the campus' older buildings have support systems that need to be updated to meet current life safety standards and heating and cooling requirements. Many campus buildings have roofs that need to be replaced.



Water leaks after a major roof failure in the Putnam Student Center.

Capital Priorities

The Missouri State University System's capital priorities are set based on a long-range planning process that is documented annually in the university's visioning guide. The facilities master plan outlines plans for a complex series of renovations called the Facility Reutilization Plan, or FREUP, that is aimed at consolidating colleges and bringing a sense of unity to campus. In addition to the renovations involved in FREUP, the university plans to continue its expansion into downtown Springfield.

The university's top capital priority is the completion of the first phase of FREUP. This project was initially funded through the Lewis and Clark Discovery Initiative. Approximately \$19.8 million is needed to complete the project.

In addition, the university has identified the following capital projects as its top three priorities for the future. The total of these projects is about \$168 million.

1 • Ozarks Health and Life Science Center

Request from state \$72,437,977

University funds + \$18,109,494

Total cost \$90,547,471

The Ozarks Health and Life Science Center will house basic and applied research and provide undergraduate and graduate educational programs that address health and life science issues. Its applied research and educational programs will be guided by regional and state needs, and the work of the center will result from collaboration with health care, education, business, community service organizations, and government.

The center will be an interdisciplinary science facility providing modern lab space and building infrastructure for biomedical and health research and education. The research infrastructure is designed to include a range of space and equipment for life science research. The center will provide office and working space for teams of faculty and students from several different departments and their collaborating partners. It will also house administrative offices for public health, several conference rooms, and instructional space.

The center will directly impact 1,400 students who are majoring in biology, chemistry, or biomedical science, as well as all of the non-majors who take courses in the affected departments.



Current science lab configurations are inflexible and outdated.

Capital Priorities, *continued*

2 • FREUP Phase II— Renovation of Pummill and Hill Halls

Project cost: \$28,525,823
(total request from state)

This project is part of Missouri State's plan to maximize use of academic and administrative space. It involves the renovation of two older buildings: Pummill Hall and Hill Hall. Pummill Hall was built in 1957 and it is in need of significant renovations to make it an efficient educational facility. Proposed renovations include upgrading the building exterior to improve energy efficiency and renovating classrooms, academic support areas, and offices to meet current occupants' program requirements and to provide a professional learning environment for students. Hill Hall was built in 1922, and it is showing its age despite some renovations over the years. The building has peeling paint and cracked plaster, damaged floors, and restrooms that are difficult to access. In addition, the building's electrical infrastructure is inadequate to support the level of technology found in other campus buildings. Much of building is not easily accessible and needs to be modified to allow efficient traffic flow. Proposed renovations include replacing the mechanical systems to improve environmental control and resolve recurring air quality problems and reconfiguring space in the building to meet current program requirements. These renovations will also correct several outstanding life safety issues and will allow ADA improvements throughout both buildings.

3 • IDEA Commons

Request from state \$39,537,438
University funds + \$9,884,360
Total cost \$49,421,798

The project will bring together innovation, design, entrepreneurship, and arts (IDEA) in an urban research park in downtown Springfield. It will include locations for spin-off commercialization of technologies and university programs and will create an environment that fosters creativity, innovation, and economic development for the benefit of the Springfield region.

The project will also provide academic space for as many as 800 students taking classes in technology and construction management, art and design, hospitality and restaurant administration, theater and dance, and business administration.



Water damage is visible on the ceiling and walls in Pummill Hall.



The stairs in Hill Hall need repair.

MISSOURI WESTERN STATE UNIVERSITY



New clock tower creates a focal point for the campus.

Missouri Western State University is a learning community focused on students as individuals and as members of society. Western offers students at all stages of life the opportunity to achieve excellence in the classroom and beyond, especially through applied learning, as they prepare to be leaders in their work and in their communities. As a leader itself, Western is committed to the educational, economic, cultural, and social development of the people and the region that it serves through applied research and professional and voluntary service.

Missouri Western is an open enrollment institution with a statewide mission of applied learning located in St. Joseph. Western's primary focus is on providing bachelor's degrees, but it also offers a limited number of master's and associate's degrees. About 5,700 students attend Western, the vast majority of whom are undergraduates.

Facility Challenges

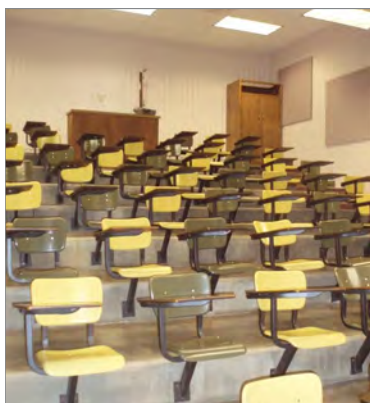
The Missouri Western campus has a wide-open feel, and the university's commitment to maintaining green space is immediately apparent to visitors. The campus features several newer or newly renovated buildings, including Eder Hall, which houses classrooms and many of the university's student services offices; Murphy Hall, which houses programs including nursing and education; and Leah Spratt Hall. The university's student union was also expanded significantly in the late 1990s. This expansion was accomplished without state funds. In addition, renovation of Remington Hall, one of the campus' primary science buildings, will be completed in December 2009. In January 2010, the complete renovation of Agenstein Hall, the campus's original science building, will begin.

Much of Western's campus is, however, older and has not been renovated recently. Many of Missouri Western's buildings were constructed in the early to mid-1970s, and some have not been substantially renovated since that time. The buildings are well cared for, but they show their age and the effects of long-term deferred maintenance. In many cases, buildings are supported by heating/cooling, electrical, and plumbing systems that are over 40 years old. Preventive maintenance has been limited because of limitations in the university's operating budget, resulting in increased equipment breakdowns and operating costs.



Floor tiles in Popplewell Hall need replacement.

A few facilities stand out as especially in need of updating. Potter Hall, which is discussed in more detail later in this report, is simply too small for the functions it houses. Wilson Hall, which is also discussed in more detail later in this report, is another example of a building that is no longer well-suited to accommodate the programs it houses. Many buildings contain classrooms and offices that have not been updated for years.



Outdated lecture hall.

Quantity of space is also an issue. A steady increase in enrollment, the addition of graduate programs, and the expansion in other programs has dramatically increased the use of campus facilities. Western needs more general education classrooms throughout campus. Several buildings house programs that have grown substantially in recent years, including Popplewell Hall, which houses administrative offices and academic departments including the business school, and the Looney Complex, which provides space for a variety of classes, programs, and activities. Popplewell Hall classrooms have had chairs added to meet increased enrollment demands, which creates egress and ADA accessibility challenges. Airflow is a major challenge in Popplewell Hall. These facilities are being used at – or, in some cases, beyond – their maximum capacity.

Facility Challenges, *continued*

In the Looney Complex, every available square foot has been converted into classroom space. Gymnasium balconies, once used for activity courses, have been enclosed for traditional classroom space and the activity courses have been crowded into spaces that were designed for other uses (racquetball courts, former weight training rooms, tennis courts, etc.). Some of the space in the Looney Complex is difficult to access. In some areas, steps create an obstacle for some of the retrofitted classroom space. The swimming pool in the Looney Complex is approximately 40 years old and has the problems typical of a facility that age. Because of increased class demands, it is not unusual to have three classes taking place at the same time in the arena.



Water damage is evident in Wilson Hall.

Finally, many of the systems that support the Western campus are aging and in danger of failing. The university's voice/video/data network has not been substantially updated since the 1990s and is well beyond its anticipated useful life. Many classroom presentation systems have also not been updated since the 1990s, and these classrooms no longer meet students' and faculty members' expectations or needs. Seven buildings have elevators in which the major components are over 35 years old. Old, inefficient HVAC systems; roofs that are seriously deteriorated; aging electrical systems; compromised sealing/tuck pointing; and deteriorated water lines are also problems in buildings throughout campus.

Capital Priorities

Western's president and cabinet regularly assess the academic needs of the university, and the safety, accessibility, and physical condition of university buildings. Based on this assessment, they develop a capital priority list. This list of priorities is recommended to Western's board of governors, who then determine which capital priorities to include in the annual appropriations request to the Coordinating Board and General Assembly. Missouri Western's administrators and board have identified the following as their top capital priorities. The total of these projects is about \$52 million.

1 • Potter Hall Renovation and Addition

*Project cost: \$35,136,338
(total request from state)*



The university band meets in this trailer outside Potter Hall. Expensive equipment is lugged between buildings daily.

Potter Hall houses Western's music, art, and theater programs. The building was constructed in 1969 and added onto in 1986. Since that addition, participation in the fine arts programs has grown, as has the number of programs offered in the building. Faculty have been added in digital media in art and video, without the additional studio and laboratory space those disciplines require. The music program needs to add faculty in recording technology to meet student demand for instruction in those techniques, but it lacks adequate facilities. There is no room for computer music workstations, which are now standard in this field. For nearly a decade, the university has rented a trailer to accommodate percussion rehearsal and instruction, with the result that expensive instruments must be moved between the building and the trailer on a daily basis. Potter Hall is too small and noisy for large band and choral groups to practice indoors; students practice outdoors and in stairwells, hallways, lobbies, and faculty studios. Hallways are filled with student lockers and used to store chairs, music stands, and instruments, creating potential fire code violations.

The proposed expansion includes increased teaching studios and a large ensemble rehearsal hall, additional music practice rooms, more storage space, spaces for exhibition of student artwork, collaborative spaces for informal student gatherings, and faculty meeting rooms. The expansion would also increase seating capacity in a performance hall used by Western and the community, as well as an intimate performance venue.

Capital Priorities, *continued*

2 • Elevator Upgrades

*Project cost: \$916,850
(total request from state)*

Many of Western's elevators are original to the buildings in which they are housed – in many cases, they are over 35 years old. Many of their major components need to be replaced, and they need to have safety features enhanced. In addition, an upgrade is needed to meet the standards established by a newly adopted state elevator code.

3 • Wilson Hall

*Project cost: \$15,498,531
(total request from state)*

Wilson Hall houses Western's programs in engineering technology, criminal justice and legal studies, and military science, in addition to the campus printing facility. It was originally built to accommodate associate programs in agricultural technology and automotive repair, which were eliminated years ago. The specialized space that was used for those programs was converted to general classroom use without being reconfigured for the new purpose. This has caused difficulties, such as high bay rooms has makeshift mezzanines. In addition, the open areas originally designed for shop work are too noisy for classroom instruction or offices. Much of the building has been broken up into small spaces, resulting in the loss of useful space to corridors. Renovation of marginally unusable space in Wilson Hall will allow the consolidation of programs to improve mathematics, engineering, technology, and science (METS) teaching and learning that are currently scattered throughout campus. These programs will be brought together in a single location, creating synergies and a "one-stop-shop" for the students they serve.

Some of the poorly configured space in Wilson will be reconfigured to support a center for METS teaching and learning that will combine Western's developmental math program, METS tutoring, and specialized facilities for METS teacher preparation in a single location. The Wilson renovation will also accommodate training of law enforcement personnel in forensic investigation and evidence custodianship. The current forensics lab is outdated, crowded, and unable to support student demand for courses or laboratory protocols.



Wilson Hall renovations are a priority for Western.

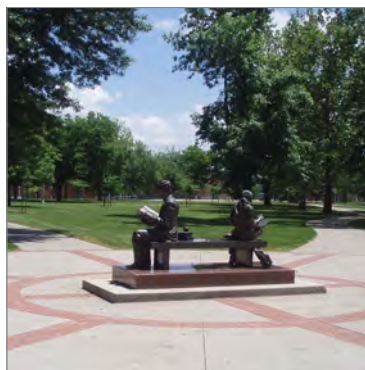


Equipment for use in some programs is outdated.



Classrooms in Wilson Hall are cramped and poorly configured.

NORTHWEST MISSOURI STATE UNIVERSITY



The Centennial Statue dedicated in 2005.

Northwest Missouri State University is a learning-centered community of scholars offering undergraduate and selected graduate programs. The University is committed to preparing broadly-educated and engaged citizens for a world of constant change, applying information technology to improve learning processes and promoting continuous improvement to enhance performance in all of its activities. Northwest seeks to expand access to learning and promote research designed to address the needs of our students and stakeholders.

Northwest is a moderately selective institution located in Maryville. Its primary focus is on undergraduate education, but it also offers select graduate degrees and certificate programs. About 7,000 students attend Northwest. Approximately 15% are graduate students.

Facility Challenges

The Northwest campus has a classic college feel, with lots of trees, green space, and old brick buildings. All buildings on the Northwest campus are well-maintained, regardless of age. However, maintenance expenditures alone cannot overcome the pressing need to renovate six crucial academic buildings to improve educational features, reduce energy consumption, and positively address sustainability challenges. The newer facilities on campus are in excellent condition and exhibit cutting-edge architectural and green design. All of the existing buildings, however, exhibit the wear and tear associated with deferred maintenance. Several buildings need life safety upgrades.

Although Northwest's buildings are well-maintained, several have inherent qualities that make them ill-suited for their current use. Examples include a building that houses the university's music programs and is so lacking in sound barriers that accreditation may be affected and a classroom building in which approximately one-third of the space is unusable. Several buildings do not meet ADA requirements; features such as narrow hallways and multi-level floors make it difficult for people who use wheelchairs to fully access the buildings.



The new Center for Innovation and Entrepreneurship will harvest natural light to save on energy expenses.



Signs of wear and tear are visible throughout the older buildings on campus.

Finding space to support a growing student body is the university's biggest challenge. The university has implemented a Rational Expectations Enrollment Plan (REEP), through which university leaders have set enrollment goals and identified the needs that will be associated with increased enrollment. This plan is designed to provide managed growth of the student population by 20% over five years and strategically increase the number of faculty and staff commensurate with the growing student population. Enrollment has exceeded targets since the adoption of REEP is currently nearly 14% higher than average enrollment during 2002-2007. A recent classroom space utilization study confirms the need for additional classrooms and offices to accommodate this growing enrollment. This growth will require 30 new faculty and 60 new staff positions. In addition, 10 additional classrooms will be needed to accommodate the planned growth.

Facility Challenges, *continued*



Permanent library stacks render one-third of the space in Wells Hall unusable.

Because of continued enrollment growth, the university's top priority is the construction of a new classroom building. The university is also considering several other strategies to increase capacity in its existing facilities, including offering more upper-division courses in the evening; increasing the number of blended, web-enhanced, and online course offerings; and converting general computer labs to open classrooms, which will be possible when each full-time student has a laptop and wireless internet is more widely available on campus.

As previously indicated, several buildings on the Northwest campus are ill-suited for their current use. One example is the Olive DeLuce Building, which houses some of the university's music and art academic programs. The building lacks sound barriers, which is a major problem for music programs, and contains open stairways that do not meet fire code, conduct sound from one floor to the next, and do not isolate fumes from art classes. The accrediting agency for the university's music program has indicated that lack

of sound barriers is a significant problem that may affect accreditation if not corrected. Another example of a building that is not well-suited to its current use is Brown Hall, which houses the university's college of education and human services. The college sponsors an early childhood education program, which is offered in the basement of Brown Hall. Unfortunately, the basement lacks natural light, and the program's accrediting agency has indicated that this is a serious problem that could negatively impact accreditation status for this important academic program. A final example is Wells Hall, which houses the departments of mass communication, communication, theater, and languages. Because the building was originally built to be a library, the core of the building – approximately one-third of the building's space – contains library stacks. These stacks are structural elements of the building and cannot be removed. They also render the space unusable. The classrooms in the building are not suited for modern instruction because of their poor sight lines and small and irregular size. In addition, the building has sustained water damage resulting from an aging roof and windows. This is particularly problematic because the expensive computers and other equipment used in the communications programs are very vulnerable to water damage.



The accreditation status of the early childhood program is threatened by its location in the basement of Brown Hall.

Each of the buildings described also has other serious problems, which are described in more detail on the next page.

Capital Priorities

Northwest's capital priorities are set in accord with the University's REEP. This assessment-oriented approach informs all aspects of campus planning, including facilities planning. Plans for facility use, renovation, and construction are developed based on data about current and projected needs, and on research about student success. Plans also reflect the university's commitment to principles like environmental sustainability and student-centered learning and are explicitly linked to the institution's strategic plan. As a result of this process, Northwest has identified the following as the university's top three capital priorities for the future. The total of these projects is about \$55 million.

1 • New Academic Building

*Project cost: \$19,693,551
(total request from state)*

A new academic building is needed to respond to growth in student enrollment. As previously indicated, Northwest's enrollment plan projects that the university's enrollment will grow 20% over the next five years. This growth will require the university to hire faculty, add classrooms, and provide offices for the new faculty. The new academic building will be "green" and will include a 75-seat lecture hall, 10 classrooms, a computer lab, an ITV broadcast room, and faculty offices and related support space. The building will be designed to add changeable, multi-purpose facilities that can be adapted to meet different classroom needs. This project would include demolishing two inefficient, aging buildings.

2 • Olive DeLuce Building

*Project cost: \$22,345,861
(total request from state)*

The Olive DeLuce Building houses music and art academic programs. The building has major problems resulting from the design of the building, including inadequate life safety systems, lack of sound barriers, and lack of thermal barriers. The project will include replacing the exterior skin with insulated walls and low-e glass to reduce energy consumption and increase the comfort of occupants. Life safety, sound transmission, and energy inefficiency problems will be resolved.

3 • Wells Hall

*Project cost: \$12,769,505
(total request from state)*

Wells Hall, which was constructed in 1939, houses the departments of mass communication, communication, theater, and languages. The building contains a significant amount of unusable space due to its original construction as a library. The building has several other issues including code violations and aging roofs and windows. The building and its systems are in need of renovation.



Performing arts theater in Olive DeLuce Hall.



Inside the Fire Arts Building.

SOUTHEAST MISSOURI STATE UNIVERSITY



The Foreign Languages Building, which opened in 1904.

Southeast Missouri State University provides professional education grounded in the liberal arts and sciences and in practical experiences.

The University, through teaching and scholarship, challenges students to extend their intellectual capacities, interests, and creative abilities; develop their talents; and acquire a lifelong enthusiasm for learning. Students benefit from a relevant, extensive, and thorough general education; professional and liberal arts and sciences curricula; co-curricular opportunities; and real-work experiences. By emphasizing student-centered and experiential learning, the University prepares individuals to participate responsibly in a diverse and technologically advanced world and in this and other ways contributes to the development of the social, cultural, and economic life of the region, state, and nation.

Southeast is a moderately selective institution located in Cape Girardeau. The university offers undergraduate and graduate degrees. About 10,800 students attend the university, and nearly 12% of those students are enrolled in graduate programs.

Facility Challenges

Southeast's campus features several historic buildings, ample green space, and attractive gathering spaces for students. There is a variety of old and new construction, including nine buildings constructed before 1909 and 24 buildings constructed between 1909 and 1959. Within the last five years, the university has added the River Campus, home to several visual and performing arts programs, and a new, state-of-the-art residence hall that houses 300 students. Although the campus is attractive and well-maintained, the older buildings represent significant challenges, including low energy efficiency; inadequate electrical service for growing technological needs; deteriorating HVAC, plumbing, and steam distribution systems; vulnerability to water damage; and inability to meet program needs.



Windows have been damaged by water infiltration.

Several of Southeast's older buildings have original single-pane, wood-framed windows; aging mechanical, electrical, and plumbing systems; and other features that reduce the buildings' efficiency. In addition, the campus' hot water and steam heat is produced by a 44-year-old coal-fired boiler that is inefficient, potentially unreliable, and does not address the growing desire to produce renewable, sustainable energy.



Peeling paint and stained ceiling are signs of water infiltration.

Another systematic problem on campus is water infiltration. Several buildings' exterior envelopes have been compromised, allowing water to enter the building. The result is severe damage to many buildings' interior walls, including cracked and crumbling plaster and peeling paint, water-stained and weakened ceilings, cracked and buckling floors, and windows with ineffective seals and deteriorated frames.

Facility Challenges, *continued*

Finally, one of the most noteworthy aspects of Southeast's campus is the fact that many of its science facilities no longer meet program needs. Most of Southeast's science labs have not been renovated since the early 1960s when they were constructed. These facilities lack modern equipment and some represent potential safety hazards because of poor layout, crowded work spaces, and aging safety equipment. These labs are of worse quality than the high schools many Southeast students graduated from, and they fall far short of the lab facilities science graduates will be expected to operate in when they enter the workforce.



Outdated labs furnishings are inflexible and awkward.

Capital Priorities

Southeast Missouri State has identified the following as the university's top three capital priorities for the future. The total of these projects is about \$100 million.

1 • Construction of a New Science Building and Renovation of Existing Buildings

NEW CONSTRUCTION

Request from state \$10,000,000

University funds ± \$2,000,000

Total cost \$12,000,000

LAB RENOVATION

\$27,000,000

(total request from state)

Teaching students through real-world experiences is a critical part of Southeast's approach to instruction. In keeping with that commitment, Southeast is seeking funds to build a new science building and to renovate its existing science buildings. Most of the university's existing lab space was built and equipped in the early 1960s. This space and equipment needs to be updated to meet contemporary standards. In addition, the university needs to add specialized lab space because of changes in technology and lab design. The need for more high-quality space is compounded by the requirements and expansion of the university's environmental science program. University officials have concluded that, given the condition of the university's current science facilities, construction of a new building containing state-of-the-art wet lab space, followed by renovation of the existing buildings, is the most efficient and cost-effective way to meet those needs.



Outdated fume hoods in a science lab.



Sinks are overused and corroded.



Crowded research space.

Capital Priorities, *continued*

2 • Campus-wide Renovations

*Project cost: \$32,763,829
(total request from state)*

Many of Southeast's academic buildings have not had significant updates in 25 years. This has resulted in the deterioration of heating/cooling systems, exterior envelopes, elevators, roofs, and utility tunnels. In addition, many buildings have inadequate electrical and plumbing systems.

Southeast is seeking funds to update several buildings' mechanical, electrical, and heating and cooling systems, and to make infrastructure updates to save energy across campus. These improvements would greatly reduce the amount of energy used in older academic buildings, resulting in an estimated \$97,000 in annual energy cost savings. The renovations would also prevent future catastrophic damage and increased repair costs, and would allow the institution to reuse century-old landmark buildings rather than constructing new ones.

3 • Renovation of Academic Hall

*Project cost: \$28,124,066
(total request from state)*

Academic Hall is the university's signature building. It was built in 1906, and many of its features are in need of upgrading or replacement. It still has over 200 single-pane windows, and its slate roof needs to be repaired. The building's infrastructure systems are beyond their useful life. The building's stone exterior needs to be cleaned and waterproofed. The cumulative impact of these outdated components is a loss of energy efficiency and periodic water damage. In addition, some parts of the building are not fully usable.



The River Campus.



Inside the University Center.

TRUMAN STATE UNIVERSITY



Kirk Memorial.

The mission of Truman State University is to offer an exemplary undergraduate education to well-prepared students, grounded in the liberal arts and sciences, in the context of a public institution of higher education. To that end, the University offers affordable undergraduate studies in the traditional arts and sciences as well as selected pre-professional, professional, and master's level programs that grow naturally out of the philosophy, values, content, and desired outcomes of a liberal arts education.

Truman is located in Kirksville. It is Missouri's only highly selective public institution of higher education and, as articulated in its mission statement, its primary focus is undergraduate education. Truman also offers select graduate programs. Total enrollment is approximately 5,800 students, about 5% of whom are graduate students.

Facility Challenges

The overall quality of buildings on Truman's campus is very high. Truman's facilities planning model involves reusing and renovating existing structures rather than building new construction. This approach has allowed the university to meet dramatically changing academic needs without constructing new facilities. The result is a relatively compact campus that has evolved to meet the university's mission as Missouri's highly selective arts and sciences campus.

The Truman campus features several excellent examples of innovative renovation projects. One such project is Pickler Memorial Library, which was most recently renovated in 1990. Another example is the Ophelia Parrish Fine Arts Center, which was most recently renovated in 2000. The center houses Truman's music, art, and theater programs. It offers flexible display space and ample space for students to work and practice.

A few of Truman's buildings, however, are dilapidated to the point that all or part of the building cannot be used for its intended purpose. The Kirk Building, for example, contains a large gymnasium that is used for storage because it would have to be renovated extensively before it could be used. The entire building is aging, and it shows the effects of long-term deferred maintenance. The building has peeling paint, cracked plaster, and severely chipped floors. The university's signature landmark building, Kirk Memorial, is mostly vacant because it requires extensive renovations. The building's heating and cooling system cannot be controlled, and the building has deteriorated over the years. There is evidence of water damage, peeling paint, and crumbling mortar. Other examples of dated and deteriorating facilities include Pershing Hall (scheduled for renovation through the Lewis and Clark Discovery Initiative) and Baldwin Hall, which dates from the 1930s.



Paint peels from the walls of the Kirk Building gymnasium.



Deteriorating entryway to the Kirk Memorial building.

Facility Challenges, *continued*

In contrast to the clearly visible problems with buildings like Kirk and Kirk Memorial, many of the most serious challenges the campus faces are not immediately apparent to the casual observer. Aging roofs, boilers, storm water management systems, and power systems are significant problems that threaten the university's ongoing operations. All of these systems need to be upgraded. Postponing upgrades increases the likelihood that a system will fail, resulting in significant unplanned expense and disruption. In addition, the university's fiber optic backbone is 15 years old and needs to be replaced, and many classrooms have obsolete instructional equipment that needs to be updated.

Capital Priorities

In keeping with Truman's facilities planning model, Truman's capital priorities involve the renovation and reuse of existing facilities. Truman's top priority is the completion of the project that was initially funded through the Lewis and Clark Discovery Initiative, Pershing Hall. Distribution of funds for this project has been halted. The total amount needed to complete the project is \$10 million.

In addition, Truman has identified the following as the university's top capital priorities for the future. These priorities were established based on academic program needs that relate to Truman's core mission. Truman staff also consider statewide initiatives, such as the drive to provide more education in the health sciences, in setting their priorities. Facility improvement requests are initiated at the department and school level, reviewed by campus planning staff to ensure they fit the long-range plan, and agreed to by the president's cabinet. Final recommendations for capital improvement priorities are then presented to the board of governors for discussion and approval. The total amount of Truman's current top three projects is approximately \$61 million.

1 • Renovation of Baldwin and McClain Halls

Request from state \$39,579,690

University funds ± \$2,347,007

Total cost \$41,926,697

Baldwin Hall is 72 years old; McClain is 33 years old. Both are in need of a major renovations to meet programmatic, life safety, and operational needs. These two buildings are essential to the university's mission. They house seven academic departments and over a third of the university's faculty. The classes provided in these buildings serve all of Truman's students through courses required in the liberal arts and sciences core. About a quarter of Truman students major in departments housed in either Baldwin or McClain.

The proposed renovation will include replacement of most interior walls, new electrical and data systems, new interior lighting, and – most importantly – new energy efficient heating/cooling systems. Both buildings are non-functional during hot weather due to the age and condition of the heating/cooling system. Temperatures often reach 90 degrees in interior classrooms and offices in both structures. Fire code compliance will be updated, as neither building has a sprinkler system. Restrooms and various entrances will be remodeled to meet ADA regulations.



Tablet desks squeezed into a classroom in Baldwin Hall.



Classrooms in Baldwin McClain contain outdated HVAC units.

Capital Priorities, *continued*

2 • Central Energy Monitoring System and Steam Loop Replacement

<i>Request from state</i>	<i>\$4,050,000</i>
<i>University funds</i>	<i>+ \$450,000</i>
<i>Total cost</i>	<i>\$4,500,000</i>

This energy monitoring system will improve temperature control and reduce energy consumption in 10 major campus buildings. The steam and condensate loop replacement will result in utility savings by replacing a failing system. The current heat distribution system loses over 45% of its steam as it is distributed to various buildings. This project will allow continuation of current core functions and programs on campus. Additional benefits include energy conservation and improvements in teaching and working conditions in campus buildings.

3 • Power Infrastructure

<i>Request from state</i>	<i>\$13,279,000</i>
<i>University funds</i>	<i>+ \$1,550,000</i>
<i>Total cost</i>	<i>\$14,829,000</i>

This project would upgrade and replace power distribution and utility systems that were originally designed and installed in the 1960s. Goals include improved reliability of systems, reduced energy consumption, and the development of a back-up system to serve the campus and the local community if electrical service is disrupted. The project is necessary to maintain core operations on campus and will be part of Truman's long-term strategy to reduce energy consumption.

Electrical work will include repairs, replacement, and revisions to the campus high-voltage system, serving 20 buildings totaling 1.5 million square feet, which will be converted to a distribution loop arrangement. Extension of the chilled water loop will allow the system to be balanced to meet demand for cooling in various buildings. This will result in efficiencies in terms of electrical consumption. The system will use chillers located in various buildings as demand peaks and will provide improved temperature control in several buildings.



Inside Pickler Memorial Library.



Auditorium in the Ophelia Parrish Fine Arts Center.



Window seating area.

UNIVERSITY OF CENTRAL MISSOURI



The historic Dockery Building.

The University of Central Missouri experience transforms students into lifelong learners, dedicated to service, with the knowledge, skills and confidence to succeed and lead in the region, state, nation and world. UCM offers a comprehensive array of bachelor's programs and selected master's and doctoral programs building upon historical strengths and statewide mission.

The University of Central Missouri (UCM) is located in Warrensburg. It is a moderately selective institution that offers more than 150 areas of study leading to bachelor's, master's, education specialist, and cooperative doctoral degrees. The university has a statewide mission in professional applied sciences and technology. About 11,000 students attend UCM, 20% of whom are enrolled in graduate programs.

Facility Challenges

The overall quality of buildings on UCM's campus is relatively high. Several of its buildings have been renovated during the last two decades, and renovation of the Morrow-Garrison complex is currently underway. Perhaps the most noteworthy recent improvements on UCM's campus are the most difficult to see with the naked eye. The university is mid-way through an energy savings initiative that includes the installation of energy efficient geothermal ground source heating/cooling systems, additional energy efficient HVAC systems, new hot water systems, more energy efficient lighting, new campus-wide building automation, life safety measures, lab air systems and controls, green technologies for curriculum utilization and campus green awareness, new roofs and windows on various buildings, efforts to improve indoor air quality in classrooms, improved air handling systems, and acoustical improvements for classroom and office space. Financing for these efficiency improvements was obtained through a lease-purchase agreement that includes all costs associated with construction, installation of equipment, and labor. Payment will be covered by the savings in energy costs, maintenance, and scheduled replacement. This project has been described by the Clinton Climate Initiative as the largest of its kind to date on a university campus in the U.S.

Unfortunately, much of UCM's building stock is in need of improvement. UCM's campus master plan, prepared by an external planning and design firm and approved by the university's board of governors in January 2009, identifies several buildings that are of "poor" quality relative to facilities conditions reported. The master plan also identifies nearly half of the campus' buildings as detracting from the overall appearance of the campus. The master plan singles out the W.C. Morris Building, which houses the university's science and mathematics programs, as particularly deficient in terms of quality.



An overcrowded and inadequate lab in the W.C. Morris Science Building.

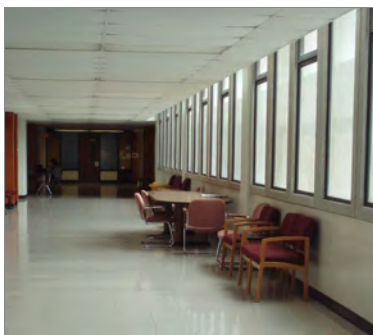
Another UCM building that is in need of updating is the historic Administration Building. The facility houses administrative functions that impact all students as well as a large theater used for university and community events, Hendricks Hall. The building itself is aging and needs exterior stone restoration and waterproofing in addition to indoor renovation. Hendricks Hall has life safety problems including limited egress routes required by current safety codes and partial accessibility to persons who use wheelchairs.

Even some of UCM's relatively newly renovated buildings need improvements and updates. One example is Dockery Hall, which is the oldest academic building on campus and was most recently renovated in 1988. Although the building has many positive attributes, it is now in need of renovation to maintain its interior and update aging infrastructure.

Facility Challenges, *continued*

Finally, the Martin Building houses UCM's broadcast studios and labs. Students taking classes in the Martin Building have an opportunity to engage in hands-on learning in the university's radio and television stations. Unfortunately, the building has deficiencies that are negatively impacting its long-term soundness. These deficiencies include water damage from leaking windows and roofs and broadcast studios that are not fully accessible to persons who use wheelchairs.

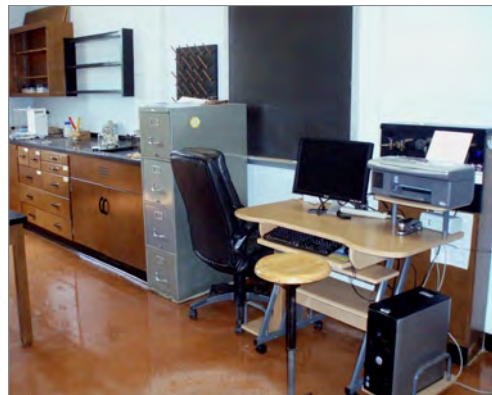
The systems that support UCM's campus are also in need of improvement. The 2009 master plan points out that most of the



Tables and chairs line the hallways of the W.C. Morris Science Building due to the lack of dedicated meeting space for students and faculty.

campus' domestic water systems and sanitary sewer systems are 50-100 years old, and much of

the piping is corroded. A great deal of the university's electrical system is dated, and delivery of electricity to the campus is occasionally a problem; the public utility cuts power off to the university on very short notice and many campus buildings do not have generators to take over when this occurs. Although the improvements previously described will significantly advance the university's energy efficiency, many additional improvements need to be made. There remains approximately \$10 million in deferred maintenance needs that include roof repairs, electrical repairs, elevator upgrades and replacements, sidewalk repairs, emergency/exit lighting upgrades, etc.



Shared research space and faculty office in the W.C. Morris Science Building.

Capital Priorities

During 2008, UCM undertook an extensive master planning effort to aid in defining short-, medium-, and long-range plans for facilities. Development of the plan was a rigorous and interactive process that engaged the campus and local community. This process enabled UCM to develop a comprehensive understanding of existing capacity and condition of buildings, which were reconciled with the university's facility priorities. The capital priorities below were developed from that planning process. The total of these projects is approximately \$85 million.

1 • New Math and Science Building

*Project cost: \$55,000,000
(total request from state)*

As previously noted, the W.C. Morris Building, which is currently UCM's math and science building, has serious deficiencies. The building is over 40 years old, and it has outlived its usefulness as a science facility. The 2009 master plan prepared by an external consultant points to several specific problems: Most faculty research must be performed in faculty offices, lab support space is inadequate, and existing lab layout arrangements do not reflect current teaching styles and pedagogy. Put simply, the building is not laid out in a way that meets current standards. This impedes undergraduate research, which is a vital part of UCM's mission, and hinders student-faculty interaction. The building is not set up in a way that allows the introduction of some kinds of modern equipment, and it lacks key features such as computer labs. UCM is seeking funds to build a new science and math building. UCM's consulting engineers have verified that, in the case of academic science facilities, new construction is less costly than renovation of existing aging structures. The new facility would be state-of-the-art and would enable the institution to fulfill its statewide mission in professional applied sciences and technology. UCM's master plan lists a new science building as the university's number one priority for future capital development.

Capital Priorities, *continued*

2 • Renovation of the W.C. Morris Building

*Project cost: \$27,550,000
(total request from state)*

As noted previously, the W.C. Morris Building has outlived its usefulness as a math and science building. UCM is seeking funds to construct a new math and science building, and the university would renovate the W.C. Morris building for other academic purposes. The building has not been significantly renovated since 1968. The project includes renovating existing classroom and teaching laboratory spaces to provide a safe environment for instruction and research; accommodate more students; enhance the teaching and learning atmosphere with state-of-the-art facilities; and improve the technology infrastructure for the installation of advanced instruments, course delivery tools, and equipment. Office space and other rooms will be renovated to improve student services, including combined computer laboratories and open study areas.

3 • Improvements at the Max B. Swisher Skyhaven Airport

*Project cost: \$2,380,000
(total request from state)*

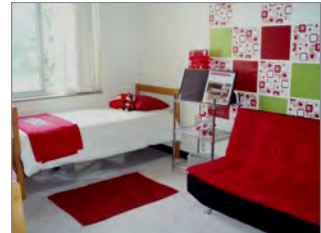
UCM is the only university in Missouri that owns and operates an airport and that offers both undergraduate and graduate degrees in aviation. The airport is a teaching lab for the university and a base for general aviation aircraft for the county and region. The airport's master plan, approved by the FAA and MODOT, indicates that expansion of the runway and facilities is warranted. MODOT supports this endeavor and is dedicated to lengthening the primary runway. This will allow for jet service, which will enhance UCM's nationally recognized aviation programs as well as boost area economic development. Initial stages of the project are underway with the support of the 2008 federal omnibus, MODOT, federal stimulus funds, and university resources. Due to the runway expansion, the present airport terminal needs to be razed and a new building constructed. The university is seeking funds to construct a new terminal building. The 15,700 square foot terminal will provide facilities for airport operations and advanced aviation classrooms and laboratories.



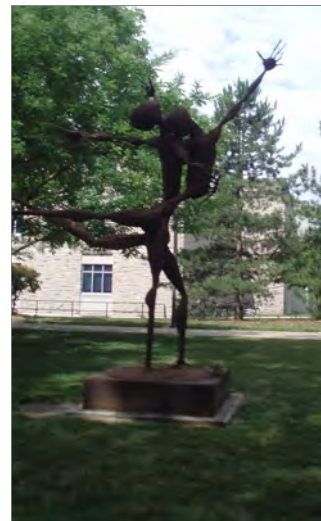
Flags line the interior lobby of Dockery Hall.



UCM's student union.



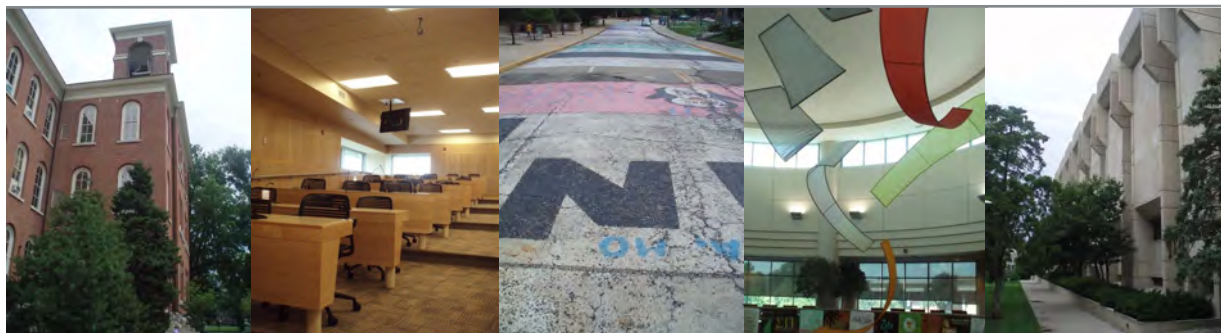
A residence hall room at UCM.



Campus sculpture.

UNIVERSITY OF MISSOURI SYSTEM

The mission of the four-campus University of Missouri System — a land-grant university and Missouri's only public research and doctoral-level institution — is to discover, disseminate, preserve and apply knowledge. The university facilitates lifelong learning by its students and Missouri's citizens; fosters innovation to support economic development; and advances the health, cultural and social interests of the people of Missouri, the nation and the world.



University of Missouri System

As indicated by the University of Missouri (UM) system's mission statement, the university's mission is multifaceted and far-reaching. The complexity of the institution is clearly illustrated by its facilities, which are numerous and diverse. Each campus has state-of-the-art new buildings that are well-suited for their current use. Each campus also has aging facilities that are in desperate need of repair, renovation, or replacement. In addition, many equipment purchases are capital expenditures. In this category, too, the university has significant needs.

The UM system's FY 2011 capital priorities were identified through the system's regular capital planning process. In that process, each campus evaluates its capital needs based on criteria including the relationship of the project to the campus' strategic plan, facility renewal, functional sustainability, availability of funding, and plans for ongoing operational support. The UM system then uses additional criteria to rank projects for which state funding may be sought. Those additional criteria include priority within the campus' capital plan, whether the project was identified as a capital priority in a previous state capital appropriations request, whether state funds have previously been appropriated for the project, whether other funds have been raised for the project, parity between campuses, system-wide benefit, and political support.

UM also has processes for identifying maintenance and repair needs and for setting targets in those areas. The university has engaged a facilities asset advisory firm that uses data to measure, monitor, and benchmark each campus' physical asset performance. The firm has determined that the university needs to spend \$57 million annually to maintain its facilities; in FY 2008, the university spent \$13.9 million on maintenance. This means that the system deferred \$43 million in maintenance needs. The university has, in fact, been forced to defer a growing backlog of maintenance since FY 2003. Higher education industry standards generally require an institution to spend approximately 1.5% of the value of their total physical assets on maintenance and repair; in recent years, UM has only been able to dedicate about 1.2%. The result is that items that could be repaired at relatively little expense are now in danger of failing, and will be significantly more disruptive and expensive to repair or replace than they would have been had regular maintenance been performed.

The system believes that before any other capital projects are funded, the top capital priority for higher education must be funding for the completion of projects initially funded as part of the Lewis and Clark Discovery Initiative. For the University of Missouri, these projects include Benton and Stadler Halls at the University of Missouri-St. Louis; Ellis Fischel Cancer Center at the University of Missouri-Columbia; Delta Research Center; Southwest Education and Outreach Center; Graves-Chapple Facility; Horticulture and Agroforestry Center; Wurdack Farm; Thompson Farm; Greenley Learning and Discovery Park; Mexico Plant Science project; and the McRedie, Midwest Claypan. The total needed to complete these projects is nearly \$73 million.

MISSOURI UNIVERSITY OF SCIENCE & TECHNOLOGY



Missouri University of Science and Technology integrates education and research to create and convey knowledge to solve problems for our State and the technological world.

Missouri University of Science and Technology (MS&T) is a selective institution located in Rolla. Its primary focus is on engineering, math, and science, but it offers a variety of degree programs – many of which contain multiple science and math courses – and others that are focused on the liberal arts and the humanities. Each degree program has a technological focus that is unique to MS&T. About 6,800 students attend MS&T; about three-quarters are undergraduates and one-quarter are graduate or doctoral students.

Facility Challenges

MS&T is the smallest of UM's campuses, and its focus on science and technology is supported by the many campus buildings dedicated to those disciplines. The campus features several new or newly renovated buildings that offer students excellent learning environments. Examples include Toomey Hall, which was renovated and added on to in 2008. Toomey is the campus' mechanical and aerospace engineering complex, and it has space designed to encourage innovation, creativity, cross-disciplinary collaboration, and hands-on learning. The campus' focus on student life is also illustrated by a new student center, new residence halls, and major renovations of older residence halls, none of which received state funds.

Despite recent improvements, the campus still has significant capital needs, both in terms of quantity of space and quality of space. MS&T's student body has grown in recent years, and continued growth is one of the campus' objectives in response to the state's need for more graduates in the science, technology, engineering, and math disciplines. MS&T will need more space to accommodate these new students. In addition, several of the campus' buildings are severely outdated – particularly given the fact that they house programs in which current technology is critical. Shrenk Hall, for example, is home to several programs that rely heavily on laboratory classes. The building's labs are outdated, and the mechanical systems that support the building are a significant impediment to upgrading the labs. The Basic Engineering Building is another example of a building that is dated and not well-suited for instruction. The building has very little usable space, and it is not energy efficient. The building does not have a sprinkler system, and egress could be a problem in the event of a fire or other emergency. The cost of renovating buildings like Shrenk and the Basic Engineering Building is high, and in some cases the most cost-effective option is to raze the building and construct a new one.



Dated and inflexible science lab in Shrenk Hall.

Capital Priorities

The following projects are the top capital priorities on the MS&T campus for which UM may seek state funding. The total of these projects is about \$120 million.

1 • Shrenk Hall—Addition and Renovation

Request from state \$68,669,000

University funds + \$17,166,000

Total cost \$85,835,000

As previously noted, Shrenk Hall is dated and no longer well-suited to instruction in the disciplines it houses, which include biological sciences, chemical engineering, and chemistry. The building's labs do not meet students' or faculty members' expectations, and their outmoded layouts and aging equipment create a less-than-ideal environment for teaching and research. Faculty members housed in Shrenk cannot all have offices and lab space in the building; they are spread out across campus, making interdisciplinary research more difficult. Problems with the mechanical systems that support a portion of the building would make renovation very difficult; the campus has therefore identified razing that part of the building and constructing a new wing as the best and most efficient option.

The problems noted above impact a large number of MS&T's students. Students in all engineering programs take classes and participate in labs in Shrenk, and a large number of students are enrolled in the departments housed in the building. One such department, biology, is one of the fastest-growing departments on campus. Its undergraduate enrollment has doubled since 2003. Shrenk's deficiencies also have a negative impact on research and the faculty members who work in the building.

After this project is completed, the building will be a state-of-the-art teaching and research facility that will be attractive to students and faculty. Its labs will be flexible, allowing for changes in scientific methodologies, equipment advances, and research programs. The building will have sufficient space for faculty offices and research labs, and the overall environment will promote interaction and collaboration.



Outdated labs are inflexible learning spaces.



Today's technology is cumbersome to incorporate into labs in Shrenk Hall.

Capital Priorities, *continued*

2 • Undergraduate Learning Center

Request from state \$12,603,000

University funds + \$3,152,000

Total cost \$15,755,000

As previously noted, the Basic Engineering Building is dated to the point of being functionally obsolete and is not suited to support engineering programs. The building will not accommodate modern environmental support services or fully meet ADA requirements. This project would demolish the 27,000 square foot Basic Engineering Building and build a new 50,000 square foot Undergraduate Learning Center on the same site. The project would provide classrooms, laboratories, and offices for undergraduate engineering programs and students. This additional space is needed because MS&T's enrollment has increased almost 20% over the last five years. Although this is a new construction project, retiring the outdated Basic Engineering Building will significantly reduce the campus' deferred maintenance backlog.

Construction of the new Undergraduate Learning Center would also represent an opportunity for MS&T administrators to implement the campus' recently established sustainability policies. The new building would be constructed in accord with the U.S. Green Building Council's LEED Certification Standards. It would provide young engineers with an illustration of sustainable construction practices, potentially resulting in long-lasting impact on those students.

3 • Emerson Electric Company Hall Addition

Request from state \$14,760,000

University funds + \$3,690,000

Total cost \$18,450,000

This project would involve the construction of a 40,000 square foot addition to the northwest side of the existing building. This addition is badly needed for the electrical and computer engineering department, which is growing quickly and is now one of the largest departments on campus. Students in the department are enrolled in undergraduate, graduate, and doctoral programs, and they participate in lecture and laboratory experiences. The new addition would provide more space for classrooms, graduate offices, and instructional and research laboratories, and would advance the institution's teaching and research missions. In addition, the project would improve environmental quality in the building and would result in reduced resource waste.



Campus bookstore.



A traditional building on the MS&T campus.

UNIVERSITY OF MISSOURI—COLUMBIA



The iconic columns.

Our distinct mission, as Missouri's only state-supported member of the Association of American Universities, is to provide all Missourians the benefits of a world-class research university. We are stewards and builders of a priceless state resource, a unique physical infrastructure and scholarly environment in which our tightly interlocked missions of teaching, research and service work together on behalf of all citizens. Students work side by side with some of the world's best faculty to advance the arts and humanities, the sciences, and the professions. Scholarship and teaching are daily driven by a sense of public service—the obligation to produce and disseminate knowledge that will improve the quality of life in the state, the nation and the world.

The University of Missouri—Columbia (MU) is a selective institution that offers a broad range of undergraduate, graduate, doctoral, and professional degrees. Approximately 31,000 students attend MU. About three-quarters are undergraduates, 20% are graduate students, and 5% are enrolled in professional school programs.

Facility Challenges

The MU campus' facilities are as diverse as its mission, ranging from the cutting-edge Bond Life Sciences Center to classic buildings like Jesse Hall to the dilapidated Lafferre Hall. While the campus may appear to be in excellent condition at first glance, closer examination reveals that MU has significant capital needs. Almost three-quarters of MU's buildings are over 23 years old and, although renovations have been done on many, these older buildings are often more difficult to maintain than new buildings. Three of the campus' most problematic buildings are described in more detail below.



Memorial Union.

Capital Priorities

The following projects are the top capital priorities on the MU campus for which UIM may seek state funding. The total of these projects is about \$177 million.

1 • College of Engineering Lafferre Hall Reconstruction Additions and Renovations

Request from state \$50,989,000

University funds + \$11,951,000

Total cost \$62,940,000



Engineering equipment is under plastic to protect from dust and water infiltration.

Lafferre Hall houses the university's school of engineering. The oldest parts of the building were constructed in 1892, with several additions constructed in later years. Conditions in Lafferre would surprise most visitors to campus. Paint is peeling, ceilings are stained, and floors are buckling. Much of the building does not receive natural sunlight, and the interior of the building is a confusing maze of hallways, classrooms, and labs. Classrooms are crowded and furnished with broken and outdated tables, chairs, and lab furniture. Many labs are filled with very old lab equipment that is in poor condition. Equipment is stacked on tables and shelves in a manner that makes it difficult to access and crowds lab users. Cracks in interior and exterior walls indicate significant settling and potential structural damage. Floors, walls, and ceilings show clear evidence of water damage from leaking roofs and burst or corroded pipes.

A partial renovation of Lafferre is currently underway, but most of the building remains in the condition described above. MU's proposed renovations of Lafferre would significantly upgrade the building. Improvements would include complete renovation of existing substandard space, as well as adding new square footage. It would incorporate a new central atrium and reconfigured entrance, relocate research functions and office space, and provide adequate floor-to-floor heights for contemporary teaching and research needs.

Capital Priorities, *continued*

2 • School of Music Facility/ Performing Arts Center

Request from state \$44,070,000

University funds + \$27,336,000

Total cost \$71,406,000

MU's school of music, the art department, and the theater department currently share space in the nearly 50-year-old Fine Arts Building. The building no longer adequately supports the missions of those disciplines; it is simply too small to house its current inhabitants, forcing each program to rely on remote space to meet its needs. In addition, the Fine Arts Building's performance hall is small and not configured to meet the needs of performers or patrons.

MU plans to construct a new building to house the school of music and a performing arts center. The new facility would include departmental offices and support for the music school, as well as a 1,000-seat concert hall; a 300-seat recital hall; shop and storage spaces; classrooms; office/studio spaces; rehearsal spaces for band, orchestra, choral, and percussion groups; practice rooms; instructional spaces; musical instrument repair spaces; and a recording studio. The project would also extend utilities to the site of the new building.

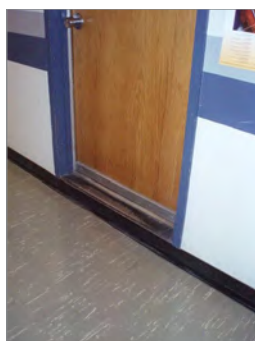
3 • General Classroom Building/ Strickland Building Renovation and Addition

Request from state \$34,276,000

University funds + \$8,569,000

Total cost \$42,845,000

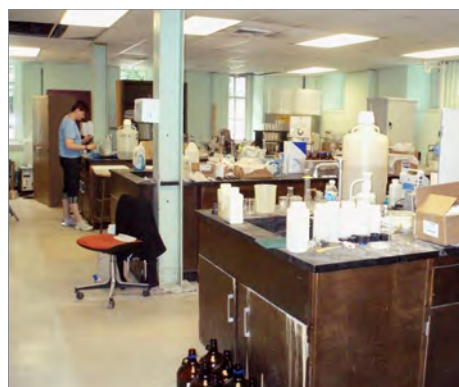
This building was constructed in 1969. MU plans to renovate the existing space and to construct an addition that will double the building's square footage. The renovation will include modernization of existing classroom technology equipment and new lighting, finishes, and building operating systems. The new space will provide state-of-the-art classrooms, faculty offices, and other educational support areas.



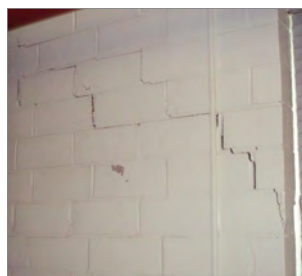
Practice rooms in the Fine Arts building are not accessible to people with disabilities.



Cabinets in Lafferre Hall have been repaired with tape.



Students utilize outdated and overcrowded labs in Lafferre Hall.



Walls are cracking in Lafferre Hall.



Paint peels from the walls and pipes in Lafferre Hall.



Stairs in Switzler Hall show signs of heavy wear.

UNIVERSITY OF MISSOURI—KANSAS CITY



The new Health Sciences Building.

UMKC's mission is to lead in life and health sciences; to deepen and expand strength in the visual and performing arts; to develop a professional workforce and collaborate in urban issues and education; and to create a vibrant learning and campus life experience.

The University of Missouri—Kansas City (UMKC) is a selective institution that offers undergraduate, graduate, doctoral, and professional degrees. Approximately 15,000 students attend UMKC. About 63% of those students are undergraduates, 26% are graduate students, and 11% are enrolled in professional school programs.

Facility Challenges

The emphases identified in UMKC's mission statement are clearly exemplified in the campus' recent and planned capital projects. The Hospital Hill Campus, which is home to the university's medical, dental, pharmacy, and nursing schools, features a new Health Sciences Building that is a state-of-the-art facility with lecture halls, classrooms, simulation labs, and other high-quality interactive learning environments. The Health Sciences Building provides space for the schools of nursing and pharmacy, both of which are in high demand from students and employers, as well as lab space for interdisciplinary research teams. The building also provides space for research and collaboration with partners in the Kansas City Area Life Sciences Institute.

The Health Sciences Building is an example of a completed project that advances the institution's ability to accomplish its mission. Unfortunately, there are several buildings that, in their current condition, detract from UMKC's ability to accomplish its mission. The campus has plans to address the shortcomings in these buildings, but identifying funding for them is a challenge. The buildings that stand out as most in need of renovation, repair, or replacement are the medical school on the Hospital Hill Campus, and the Spencer Chemistry Building and the James C. Olson Performing Arts Center on the Volker Campus. Other mission-related challenges on the Volker Campus include inadequate quantity of space for undergraduate general education and facilities that do not optimally support student life on campus.



Students and their instruments are squeezed into tiny practice rooms in the Performing Arts Center.

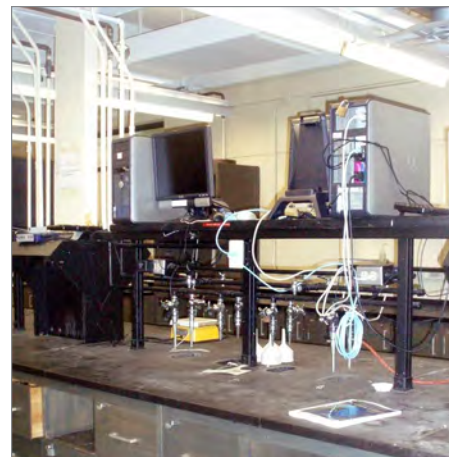
UMKC's medical school stands in stark contrast to the Health Sciences Building described above. The medical school building was constructed in 1971 and, although it has had some cosmetic updates since then, many of its systems are aging and in need of repair. The building has a growing backlog of deferred maintenance and repair needs, and its library has been cited by accrediting agencies as inadequate to support health sciences research and educational programs. In addition, the faculty research principles around which the school was designed are now outdated. Funding for a major renovation of the medical school is one of the campus' top priorities, and plans for the renovations are discussed in more detail in the Capital Priorities section of this report.



Nursing students are trained on state-of-the-art equipment in the new Health Sciences Building.

Facility Challenges, *continued*

On the Volker Campus, renovation of the Spencer Chemistry Building and the expansion and renovation of the James C. Olson Performing Arts Center have been identified as long-range priorities. The Spencer Chemistry Building is seriously outdated, and it provides inadequate space for teaching and research. The labs do not meet current standards, and they are configured in a way that severely hinders students' ability to learn collaboratively. The labs' equipment is also outdated, and the space available is too small to accommodate instruction of the large number of students who take classes in the building. The proposed renovation would improve lab systems and teaching and support space, and would eliminate a significant amount of deferred maintenance. The James C. Olson Performing Arts Center was built in 1978 and now lacks sufficient practice rooms, classrooms, and instrument storage space to accommodate student demand. Building systems, theatrical equipment, and technology also need to be brought up to current standards. Also on the Volker Campus, several projects aimed at improving campus life are currently in the advanced planning stages or already underway, including the construction of a new residence hall, soccer stadium and playing fields, and student union. These projects will be completed with funds other than state monies, including student fees and private gifts.



Outdated labs cannot easily accommodate the technology required for today's study of science.

Capital Priorities

The following projects are the top capital priorities on the UMKC campus for which UIM may seek state funding. The total of these projects is about \$159 million.

1 • Miller Nichols Library Renovation and Interactive Learning Center Addition

Request from state \$40,650,000

University funds + \$26,550,000

Total cost \$67,200,000

This project would involve the construction of a new interactive learning center addition west of the existing Miller Nichols Library for educational and support space. It would also involve the renovation of existing space in the library itself. A separate \$20 million project funded by campus resources and private gifts started construction in December 2008 and is to be completed in 2010. The completed complex would feature interactive, shared, and multi-use spaces for collaborative learning, library instruction, and information technology. UMKC cannot currently meet Kansas City's workforce needs, and this new facility would enhance instructional capacity in the core campus by 25%. This would support campus-wide enrollment growth and would also provide for a sustained increase in current and anticipated library collections for at least 15 years. The renovation phase of this project will address approximately \$13.5 million in deferred maintenance, which represents 100% of the facility's current maintenance needs.



Library space that currently houses traditional stacks will be renovated.

Capital Priorities, *continued*

2 • School of Medicine Renovation and Health Sciences Education Building, Phase II

Request from state \$44,070,000

University funds + \$27,336,000

Total cost \$71,406,000

This project would include the addition of new space for the medical school and renovation of some existing space. The new space would provide state-of-the-art educational program support services, including a large shared auditorium, classroom/meeting spaces, teaching laboratories, and patient simulation labs. The renovation would include rehabilitation of nearly half of the building's existing space, including updating an existing lecture theater and support spaces and a significant expansion of the library. The project would address approximately \$13 million in deferred maintenance.

3 • School of Dentistry Building Addition

Request from state \$15,930,000

University funds + \$4,250,000

Total cost \$20,180,000

UMKC's dental school is currently at capacity. The school is the only dental school in Missouri, and the school, its students, and the state would benefit greatly from expanded capacity. This project would add new space to the school, as well as renovating existing space. This project would allow the school to increase enrollment by 25%, and would eliminate approximately \$200,000 in deferred maintenance.



UMKC campus.



UMKC's medical school was built in the early 1970s and needs to be updated.

UNIVERSITY OF MISSOURI—ST. LOUIS



The Millennium Student Center.

The University of Missouri—St. Louis provides excellent learning experiences and leadership opportunities for a diverse student body through outstanding faculty, ranked programs, innovative research and regional, national and international partnerships.

The University of Missouri—St. Louis (UMSL) is a selective institution located in suburban St. Louis County. Approximately 16,500 students attend the university. About 78% are undergraduates and 21% are graduate students. About 1% of the total student body is enrolled in professional school programs.

Facility Challenges

Facilities on UMSL's campus are in varying condition. Constructed in 2000, the Millennium Student Center is part of the student life district on campus and provides a one-stop shop for students. This superior facility boasts a social lounge, a quiet study lounge, a student art gallery, a large tiered meeting chamber, and an expanse of first-class conference areas. Student administrative services, as well as student life organizations, like the campus newspaper and student government, are housed in the Center.

Although UMSL's mission statement identifies excellence as a primary institutional goal, some of the campus' facilities do not support that goal. UMSL has an aging campus, with over three-quarters of its space over 25 years old. Major renovations



Science laboratories are in a state of disrepair.

have shifted the age profile only slightly. Older buildings on campus show signs of wear and tear, including peeling paint, broken light fixtures, and damaged floor tile. Additionally, concrete sidewalks and steps are damaged at locations throughout campus. The total estimated maintenance and repair backlog is \$132 million.



Floor tiles are missing from a laboratory floor in Benton-Stadler

The quality of instructional and support space on campus ranges from poor to excellent. Benton and Stadler Halls, which house science laboratories and classroom space, are in a state of disrepair. Many of the buildings' laboratories are outdated. Countertops are permanently stained and corroded. Furnishings are rusted, cracked, and broken. Light fixtures are rusting and paint is falling off the ceiling. Large sections of tile are missing from laboratory floors.

Other facilities on campus house programs or activities for which they were not originally intended. One of the best examples of this is Marillac Hall, which was originally constructed as a dormitory and is now used for the college of optometry. Although UMSL staff has used the facility creatively, the space is not well-suited for its current use. This limits the growth and development of the college.

Capital Priorities

The following projects are the top capital priorities on the UMSL campus for which UM may seek state funding. The total of these projects is about \$153 million.

1 • College of Optometry/ College of Nursing Complex

Request from state \$63,098,000

University funds + \$15,774,000

Total cost \$78,872,000

As previously described, the college of optometry is currently located in a building that was designed as a dormitory. While the university has made the best possible use of the facility, several spaces are awkward and not well-suited for their current purposes. For example, patient exam rooms are housed in former dormitory rooms that are too small, lack adequate natural light, and still house obvious dormitory relics. The college of nursing is housed in two separate facilities. One building was originally designed for administrative use; the other facility was originally designed as a dormitory. Combining the colleges of optometry and nursing in the same facility would allow the colleges to share space and capitalize on synergies between health-related professions. This model of collaborative space between the two colleges would be the first of its kind in the United States.

The new facility to house both the college of optometry and the college of nursing would provide 225,000 square feet for instructional space; patient clinics; research; and multipurpose student, office, and building support. Proposed building plans include tiered classrooms, simulation lab virtual learning areas, critical care simulation labs, video observation rooms, and an auditorium/simulation operating theater.



Light fixtures are broken and paint peels from the ceiling in Marrillac Hall.



Hallways in Marrillac Hall are dark, narrow, and curved.



Exam rooms for the optometry program are former dormitory rooms.

Capital Priorities, *continued*

2 • College of Business Administration

Request from state \$25,883,000

University funds + \$6,471,000

Total cost \$32,354,000

UMSL's college of business administration does not currently have enough space to accommodate its students, faculty, and staff. Various college activities are located in a number of buildings across the campus including the University Center, the Social Science and Business Building and Tower, and the Computer Center Building. This project would construct a new 100,000 square foot facility for the college. This would allow all program components to be combined into one location, which would serve as a hub for all college of business administration educational and related activities. A programming and planning study for the project has been completed.

3 • Campus Infrastructure Development

Project cost: \$42,144,000
(total request from state)

This request would provide funding for campus infrastructure improvements including interior and exterior ADA modifications, road and utility improvements on the North and South Campus, and a new campus signage system.



Inside the Millennium Student Center.



Classroom for technology based learning.

UNIVERSITY OF MISSOURI SYSTEM

Engineering Equipment

One of the state's top priorities for higher education is increasing the number of graduates in math, engineering, technology, and science. This priority is reflected in *Imperatives for Change*, the state's coordinated plan for higher education, and in the University of Missouri's goals and programs. This goal is also supported by state law, which requires UM to request funds for engineering equipment each year. Cutting-edge engineering and technology-based equipment is necessary for the university to produce the number and caliber of engineering graduates the state needs to advance its economic development agenda, as well as to support the university's teaching and research activities.

The statutorily created program that requires the university to request funds for engineering equipment establishes guidelines for the request. Unfortunately, the program has not been funded since 2003. Based on the guidelines set forth in the law, there is a \$7.5 million backlog of funding for equipment purchases. This backlog accumulated during a period in which students enrolled in approximately 390,000 credit hours of engineering courses at UM campuses and the university conferred over 6,000 bachelor's degrees in engineering.

UM is requesting the following amounts to fund the replacement of teaching and research laboratory equipment for the institution's engineering colleges.

	State Request	University Funds	Total
Columbia	\$390,000	\$390,000	\$780,000
Kansas City	\$58,800	\$58,800	\$117,600
Rolla	\$788,400	\$788,400	\$1,576,800
St. Louis	\$55,200	\$55,200	\$110,400
Total	\$1,292,400	\$1,292,400	\$2,584,800

Other Curator Program Capital Needs

The University of Missouri system's annual budget request includes requests for funding for other programs that are statutorily separate that are in addition to the requests for the campuses. These programs include the University of Missouri Health System, MOREnet, and the State Historical Society. Each of these programs has its own mission, and all operate under the auspices of the university's board of curators.

UNIVERSITY OF MISSOURI HEALTH SYSTEM

University of Missouri Health Care's core mission is to advance the health of all people, especially Missourians. Through exceptional clinical service, University of Missouri Health Care supports the education and research missions of the University of Missouri.

The University of Missouri Health System includes several hospitals and clinics that provide care to citizens throughout the state and support the education of future health professionals enrolled in MU's health sciences schools. Several facilities are in Columbia: the University Hospital and Clinics, the Ellis Fischel Cancer Hospital, the Missouri Psychiatric Center, and the Columbia Regional Hospital. The Missouri Rehabilitation Center is located in Mount Vernon. The university is making \$248 million in capital investments to expand and replace inadequate facilities with the construction of the new orthopedic institute, renovations for the new children's hospital at the Columbia Regional Hospital site, and the new patient care tower. Another \$32 million originally appropriated through the Lewis and Clark Discovery Initiative and now on hold will also be used toward the completion the new Ellis Fischel Cancer Center within the patient care tower.

Capital Priority

In addition to securing funding for the Ellis Fischel Cancer Center that was initially part of the Lewis and Clark Discovery Initiative, the following project is the MU Healthcare System's top capital priority for which UM is seeking state funding.

Missouri Rehabilitation Center Facilities Upgrades

*Project cost: \$5,000,000
(total request from state)*

The 136-bed Missouri Rehabilitation Center Hospital in Mount Vernon became part of the UM-Columbia Health Sciences Center on July 1, 1996. Major repairs are needed to the brick enclosure system on the center's Hearnes Building. Recent building envelope failures have caused buckling of the existing brick panels away from the building's structural system, which compromises safety. Structural engineering analysis has been performed, and recommendations include removal and replacement of all panels, incorporating state-of-the-art design of cavity walls, vapor barriers, flashing, and weeps, with replacement of curtain walls and all windows. Currently, water infiltration from window leaks is causing extensive interior corrosion.

MOREnet

MOREnet provides Internet access and telecommunications services to elementary, secondary, and higher education communities, public libraries, and state government. MOREnet seeks to provide technology solutions that enable innovation and opportunity for our member organizations. We explore and deliver new ways to enhance learning opportunities and create a better quality of life for all Missourians.

MOREnet has significant equipment needs that must be fulfilled in order for this shared network to continue to meet its users' needs. Improvement of equipment resources will provide high-quality reliable service to Missouri students and support increased distance learning opportunities.

Capital Priority

The following project is MOREnet's top priority for which state funding is requested.

One-Time Network and Video Equipment Replacement

*Project cost: \$3,535,000
(total request from state)*

The current Cisco 12000 series backbone routers and Cisco 10000 series aggregation routers went into production in 1999. A technology refresh is needed to maintain performance and support the growth in bandwidth, as well as to support the new internet addressing standards (IPv6). The growth in internet access, the continued increase of internet security risks, and the need to connect directly with content providers to reduce internet costs require MOREnet to add new network equipment that connects the MOREnet backbone to the internet. A video equipment refresh is needed to support the increased use of video services; to support new video standards, including high definition two-way videoconferencing; and to improve performance and reliability of the video service.

STATE HISTORICAL SOCIETY

The State Historical Society of Missouri is directed by statute to collect, preserve, make accessible and publish materials pertaining to the history of the state and western America.

Founded in 1898 by the Missouri Press Association, the society has been a trustee for the state for the past century. The State Historical Society of Missouri serves as a research facility for the study of the Missouri's heritage and provides programming designed to share that heritage with the public.

The society currently operates in a facility on the ground floor of the MU Elmer Ellis Library. This space is far too small for the society's storage and display needs. It allows for less than one-half of one percent of the art collection to be displayed at any one time. Additionally, two-thirds of the manuscript collection is stored off site because of inadequate space. The society needs approximately three to four times their current space for present and future preservation, storage, display, and research needs.

Capital Priority

The following project is the State Historical Society's top priority for which state funding is requested.

State Historical Society Building and Museum

*Project cost: \$45,132,900
(total request from state)*

This project will provide a new five-story 147,760 square foot building to accommodate the research, curatorial and educational functions, and services of the State Historical Society of Missouri and the Western Historical Manuscript Collection-Columbia. Both hold large collections of artwork, documents, manuscripts, microfilm, and photographs that are used regularly by University of Missouri faculty and students, as well as by researchers from all over the state and nation.

The State Historical Society and the Western Historical Manuscript Collection assisted approximately 1,300 University of Missouri students with research projects during 2008. Additionally, both have assisted another 130 students from other higher education institutions, both within and from outside Missouri. Most of these students were in the field of history, although other students were studying in the fields of archaeology, anthropology, linguistics, English, geography, religion, music, and theater. Graduate and undergraduate students represent approximately 10% of society facility users.

LINN STATE TECHNICAL COLLEGE



Linn State's aviation maintenance facility.

Linn State Technical College prepares students for profitable employment and a life of learning.

Linn State Technical College is located in Linn and serves students from many counties in Missouri, though nearly 50% of the student population is from the 10 surrounding counties because of local interest in specialized programs. In most programs, approximately 80% of Missouri counties are represented. The college operates off-campus sites at the Capital Region Medical Center in Jefferson City and the Advanced Technology Center in Mexico. Approximately 1,100 students attend Linn State.

Facility Challenges

In pursuit of its institutional mission, Linn State offers many technical programs that require specialized equipment and dedicated space, which means that facilities challenges are of particular significance on campus. Although Linn State makes every effort to provide the most up-to-date equipment and machinery available for academic programs, it is difficult to keep pace with industry-driven changes in technology. Technology and equipment replacement, upgrades, and repairs are costly.

Most of Linn State's programs require specialized space. In many cases, students leave the materials they are working on out for long periods of time. Examples include students learning to take apart motors or work on circuit boards. When the class is over, students leave their material on countertops and at work stations. In addition, much of the equipment used for instruction is large and requires ample space in order to be operated safely. This makes scheduling classrooms for several different classes a day a challenge. The result is that quantity of instructional space is a major challenge for Linn State.

The specialized nature of each program also makes renovation a challenge. As the physical plant of the college has grown over the past 20 years, programs have moved to and from various buildings. The classroom space must be restructured to meet the needs of a new area of instruction. Renovations are costly when performed on spaces that were previously specialized for one area of instruction.



Mini-assembly line provides an opportunity for hands-on learning.



Equipment in the HVAC learning lab requires sizeable dedicated space.

Although facilities on campus are relatively new, general maintenance and upkeep is another of the college's most serious challenges. The kinds of instruction that Linn State specializes in, by their nature, have a high impact on campus facilities. Additionally, in some facilities, HVAC systems do not meet the needs of current activities. Some buildings have ADA issues as well as life safety issues that need to be addressed in the near future.

In general, the quality of instructional and support spaces on campus is very good. Wear and tear is visible in some lab facilities, which is to be expected considering the activities they house. Additionally, there is minor wear and tear in general campus spaces. The Information Technology Center and the Activity Center provide contemporary spaces for students to eat, study, congregate, and play. Computer labs are also available on campus.

Capital Priorities

Linn State Technical College's strategic planning efforts drive the college's master plan for the physical plant. Based on completed planning efforts, the college has already constructed several facilities. The college's current top three capital priorities—totaling \$12.6 million—are:

1 • Engineering Technology Wing

*Project cost: \$4,011,253
(total request from state)*

The industrial electricity program is currently operating at capacity. Students applying more than once are in competition with new applicants. Renovation and expansion of a new engineering technology wing will increase program capacity by 50%. In addition, the new wing will provide space for the college's new electrical power generation program.

2 • Auto Collision Repair Technology Facility

*Project cost: \$870,100
(total request from state)*

Renovation of the former auto collision repair facility will provide an updated space for the commercial turf and grounds program. By moving this program to the newly renovated facility, efficiencies will be created on campus and in the program. In addition, new classroom space will be available for commercial turf and grounds students and capacity for the program will double. Classroom and laboratory space in the vacated facilities will be made available to other expanding campus programs.

3 • Student Services Wing

*Project cost: \$7,742,500
(total request from state)*

Student services are currently housed in several different facilities on campus. The addition of a student services wing onto the existing information technology center would provide one centralized location for all student and parent needs. Completing basic student activities would become more efficient and effective with the construction of a new student services wing.



Information Technology Center.



Floor damage.



Automotive technology.



Greenhouse on campus.



Wall damage.

CROWDER COLLEGE



Crowder has a range of old and new facilities.

It is our mission and purpose to serve the needs of people by actualizing each person who chooses Crowder College in terms of his or her self-worth and ability to function in society as responsible citizens.

Crowder College is located in Neosho. The college's service area extends into portions of nine southwestern Missouri counties, including the communities of Joplin, Webb City, Carthage, Lamar, Nevada, Monett, and Cassville. In addition to the main campus, Crowder has satellite campuses in Cassville, Nevada, and Webb City. Approximately 4,000 students attend the college.

Facility Challenges

The condition of facilities on Crowder College's campus ranges from outstanding to fair. The recently constructed Farber Building houses updated classrooms, conference rooms, faculty offices, student services, and an expanded library, all of which contain state-of-the-art technology. The college is also home to the Missouri Alternative and Renewable Energy Technology Center, which is recognized internationally for its contributions to the energy field. From any point on campus, visitors can see a wind turbine that is currently producing electricity for campus and that serves as a teaching lab for students in Crowder's associate's degree in alternative energy and wind energy technician programs. The college also features solar houses that offer students an opportunity to learn about solar technologies in a hands-on setting.



Active wind turbine on campus.

Facilities challenges are impacted by the growth that Crowder College has experienced in the last decade: Total enrollment has more than doubled in the last 10 years. As academic program enrollments grow, the college reconfigures spaces for expanding programs. However, there is not enough space to meet every academic need. Art programs have been relocated to the former library, and classrooms in that area still house the semi-permanent library stacks. Other classrooms house both a computer lab and traditional seating, and the space is often used for both purposes simultaneously. The need for space is so great that a hallway in one building is being converted to offices for staff.



Art students must work around stacks in the converted library space.

One of the clearest needs on Crowder's campus is the need for additional science facilities. With just two labs, the college serves every general education student on campus in addition to students in nursing, allied health, and veterinarian technician programs. The demand for science classes to support the nursing and veterinarian technician programs surpasses capacity. The nursing program can accept only one out of every three applicants who applies to the program. Science lab classes are scheduled back-to-back for more than 12 hours a day. This level of classroom utilization overburdens the laboratories and stresses both students and faculty.

The college has taken steps to improve the quality of instructional space by ensuring that every classroom contains smart technology. In addition, campus staff is diligent about providing appropriate furnishings and maintaining clean facilities. The two campus science laboratories have newer furnishings and equipment.

The quality of instructional space on Crowder's campus is limited by the fact that many campus facilities are older. The buildings in which several classrooms and academic programs are housed are converted army barracks. Hallways are narrow, ceilings are low, stairways are cramped, and the layout of the buildings is somewhat difficult to navigate.

Facility Challenges, *continued*

Temperature control is also an issue in the converted barracks. Some of the older buildings on campus rely on outdated heating and cooling systems that are costly and inefficient. Buildings are heated by an inefficient hot water circulation system that relies on a pair of natural gas-fired boilers. Buildings have no central cooling source; window unit air conditioners are commonplace on campus. In many classrooms, noisy window units make it difficult or impossible for students to hear their instructors.



Window units are commonplace on campus.

Capital Priorities

The following items represent Crowder College's top capital priorities for the future. The projects total about \$14 million.

1 • Health and Science Career Center

<i>Request from state</i>	<i>\$2,520,000</i>
<i>Federal funds</i>	<i>+ \$2,180,000</i>
<i>Total cost</i>	<i>\$4,700,000</i>

Science lab facilities on the Crowder College campus are over-extended. A new health and science career center would house several new science classrooms and laboratories, and would greatly increase the number of spaces available to meet increasing student demand. With the construction of new science facilities, the college will be able to effectively serve more students and ultimately produce more graduates, especially in nursing and allied health fields.

2 • McDonald County Workforce Development Center

<i>Project cost:</i>	<i>\$4,800,000</i>
<i>(total request from state)</i>	

The college recently purchased approximately 40 acres in McDonald County on which it plans to build a new 25,000 square foot workforce development center. A permanent facility is this area, which is in Crowder's two-county taxing district, would serve 600 students. The service center would also serve the growing population in the McDonald County area and reduce the burden on students who are currently commuting from Neosho. In addition, Crowder would use the workforce development center in McDonald County to establish new programs and expand existing programs

3 • Webb City Workforce Development Center

<i>Project cost:</i>	<i>\$4,800,000</i>
<i>(total request from state)</i>	

The current facility in Webb City, a converted National Guard Amory, is bursting at the seams. Approximately 600 students attend classes in the facility, which was designed to accommodate 150–200 students. These overcrowding issues threaten the college's ability to meet student demand in the area. In addition, the Armory is an older and inefficient facility.



Solar house on campus.



Lobby of the new Farber Hall.

EAST CENTRAL COLLEGE



Campus facilities on the hillside.

East Central College will provide an environment for lifelong learning.

The main campus of East Central College is located in Union. Satellite locations include the Rolla Technical Center and Nursing Program Center in Rolla, the Southwest Area Center in Sullivan, and the Four Rivers Career Center in Washington. The college's service area extends into nine central eastern Missouri counties. Approximately 4,200 students attend the college each year.

Facility Challenges

East Central's main campus facilities are nestled on a green hillside. The condition of facilities on the main campus ranges from excellent to fair. The recently constructed Health and Science Building is a superior science facility equipped to provide instruction in allied health and multiple scientific disciplines. The building houses several flexible laboratory spaces that exhibit modern instructional technology. Classrooms are spacious and there are ample faculty and staff workspaces. A state-of-the-art lecture hall is also housed in the facility.

As East Central strives to maintain its rich academic environment, it faces facility challenges that are characterized by a lack of space, outdated elements, and maintenance and repair issues. Various programs offered on the main campus and at satellite locations are operating at capacity and are constrained by facility or equipment needs. Graphic design is limited by computer lab equipment and space. Culinary arts is limited by the size and capacity of the learning kitchen, and the equipment and stations required. The nursing program offered in Rolla is limited by the facility. Several other programs on the main campus are limited by facilities, including welding, automotive technology, computer networking, and HVAC. Student applicants are turned away from these programs.



A state-of-the-art nursing lab in the new Health and Science Building.



Stairs in the library prevent access for students with disabilities.

The lowest-quality facility on campus is the Administration Building, which houses student services, several classrooms, the library, and student learning support spaces. While some areas of the building have been renovated, other areas have dated or damaged lighting, flooring, and classroom furnishings. There are several rooms in which teaching technologies have not been updated because of the presence of asbestos in the floor and ceiling. Student learning support areas do not provide adequate space to serve student needs, and not all areas of the building are suitable for students with disabilities.

Although the college has worked diligently to reduce deferred maintenance on campus, there are still issues to be addressed.

Facilities exhibit varying signs of wear and tear. Air handling units in the Administration Building have become functionally obsolete. They are costly to operate and maintain. ADA compliance issues also need to be addressed in both the Administration and CC Classroom buildings.

Capital Priorities

A master plan for the facilities on campus was completed in 2006. Since then, several projects have been completed, and several are left to complete. Staff at the college use the campus master plan to guide decisions about capital priorities. The following items represent the college's top capital priorities for the future. The requests total about \$10 million.

1 • Student Services Building Renovation

<i>Request from state</i>	<i>\$4,120,000</i>
<i>College funds</i>	<i>+ \$4,120,000</i>
<i>Total cost</i>	<i>\$8,240,000</i>

Every student on campus uses the Administration Building, which was originally constructed in 1972. The facility is home to the library; classrooms; and the admissions, registration, advising, counseling, financial aid, and administrative offices, as well as the learning center. Renovations to the 60,000 square foot facility would upgrade and expand space for several programs in the building. The renovation would also address ADA compliance issues with the elevator, library, and student support areas. Asbestos abatement will be necessary. The project would result in significant energy savings as inefficient infrastructure is replaced with state-of-the-art equipment and software.

2 • Multipurpose Building Renovation

<i>Request from state</i>	<i>\$500,000</i>
<i>College funds</i>	<i>+ \$500,000</i>
<i>Total cost</i>	<i>\$1,000,000</i>

Renovation of the Multipurpose Building would upgrade selected portions of the building to better utilize existing space. The project would include renovation of selected classroom space, additional meeting/conference space, elevator modifications, addition of general building storage, and other needs as identified. Asbestos abatement would be necessary as part of the renovation. The building currently houses the gymnasium, cafeteria, bookstore, fitness center, classrooms, academic offices, and human resources.

3 • Add Loop Road, Parking, and Reconfigure Campus Entrance

<i>Request from state</i>	<i>\$300,000</i>
<i>College funds</i>	<i>+ \$300,000</i>
<i>Total cost</i>	<i>\$600,000</i>

The college does not currently have a roadway that provides circulation around the entire campus. A loop road will provide better access, improve traffic circulation, and better serve the renovated student services building described above. Additional student and visitor parking designated for the student services facility would improve access and enable students to readily address admission, advisement, and registration needs. In conjunction with the addition of the loop road, and in collaboration with the City of Union as it makes improvements to a main entry road, the college would reconfigure its entrance to provide improved ingress and egress.



Many classrooms in the Administration Building are outdated.



In Administration Building classrooms, light fixtures are outdated and ceilings shows signs of damage.



Students are crowded in a computer lab in the Administration Building.

JEFFERSON COLLEGE



The new Arnold facility.

Jefferson College is a student-centered comprehensive community college, committed to providing an accessible, quality college experience as it strives to meet the diverse needs of the students and the community. Superior teaching and services foster a supportive learning environment, which promotes intellectual, social, and personal growth. A strong general education curriculum, college transfer and technical programs, personal enrichment courses, and on-campus experiences prepare students to succeed in their careers, further their education, and prosper in a diverse world. Jefferson College's ongoing assessment of students, programs and services assures that it is a responsive and progressive community college.

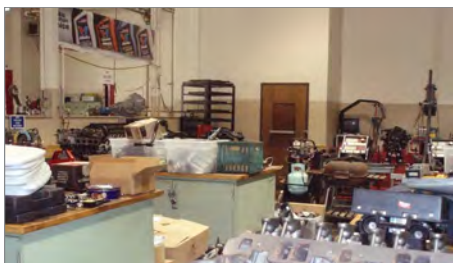
Jefferson College serves Jefferson County residents with its main campus in Hillsboro as well as additional campuses in Arnold and High Ridge. Approximately 5,800 students attend the college.

Facility Challenges

Lack of space is one of the most significant facility challenges facing Jefferson College. In 2009, the college experienced record high enrollments. The college's Jefferson County service area is growing rapidly due to migration from St. Louis City and County. However, the ability of the college to serve the growing population is limited by physical space constraints.

As the college strives to offer more classes and programs, space is reallocated to accommodate the new offerings. This often results in decreased space for some vital programs. For example, the space allotted to academic support services has significantly decreased in order to provide space for other expanding student services functions.

Nursing programs are at capacity. More than half of student applicants are turned away from the daytime licensed practical nursing program and over 60% of applicants are denied entry into the registered nursing program. The need for additional space and faculty are constraints on the programs.



Space is extremely limited in the automotive program.

Space is also particularly insufficient in career education and technical programs on campus because of the specialized equipment required for the disciplines. The equipment used for welding and automotive technology, for example, requires relatively large amounts of space in order to be used safely. In the public safety and emergency medical technician programs, space is not adequate for students to actively practice skills. The space constraints described here hinder the college's ability meet the diverse needs of the students, as described in its mission.

Additional space is also needed at the new facility in Arnold. Enrollment on the Arnold campus has grown by over 20% for each of the last several years and currently accounts for 20% of total credit hours generated by the college.

The quality of instructional space on Jefferson College's campuses ranges from excellent to fair. The new Arnold facility space is of superior quality. Interior building materials and furnishings are modern, appropriate technology is available, and classrooms are spacious. The facility has several modern science laboratory facilities.



A state-of-the-art science lab at the Arnold Facility.

Facility Challenges, *continued*

Several of the core buildings on the main campus were constructed in the 1960s and 1970s. In some facilities, flooring, lighting, wall coverings, and furnishings are somewhat dated but well maintained. Other facilities have been more recently renovated and are of good quality. Technology is available in most classrooms.

The Hillsboro campus has aging support systems, including the water main system and the electrical system. In the event of a fire-related emergency, meeting the need for water could be difficult due to the limitations of the current infrastructure. Additionally, the electrical load in several buildings needs to be increased to accommodate current technological needs. The college also has various deferred maintenance needs, including roof and HVAC replacements.

Capital Priorities

The following items represent Jefferson College's top capital priorities for the future. The projects total about \$21.2 million.

1 • Allied Health/ Public Safety Building

*Project cost: \$19,000,000
(total request from state)*

The nursing, fire science, emergency medical technician, and law enforcement programs are at capacity on the Hillsboro campus. These programs admit only 50–85% of eligible applicants due to space and faculty constraints. Jefferson College also plans to add complementary programs in homeland security, dignitary protection, and corporate security. Efficiencies would be created if these similar disciplines shared resources in a new facility.

2 • Additional Classrooms Arnold Campus

*Request from state \$875,000
College funds + \$875,000
Total cost \$1,750,000*

The Arnold campus facility was constructed in 2007, and growth since that time has been tremendous. Student demand for courses is exceeding college estimates for growth and has begun to create space issues for the new facility. This renovation would provide six additional classrooms on campus.

3 • Roof Replacements

*Project cost: \$450,000
(total request from state)*

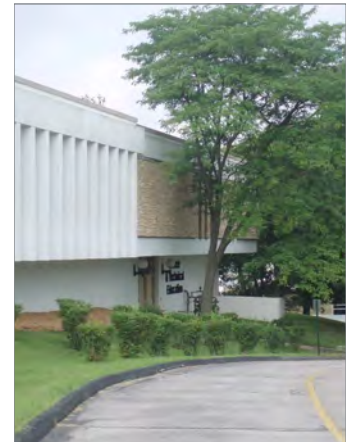
The roofs on several buildings of the Hillsboro campus need to be replaced.



HVAC lab.



Career Development Center.



Career and Technical Education building.

METROPOLITAN COMMUNITY COLLEGE



MCC Penn Valley campus.

Preparing students, serving communities, creating opportunities.

Metropolitan Community College (MCC) is a five-campus college located in the Kansas City area. Campuses located throughout the college's nine-county service area include Blue River in Independence, Business and Technology near I-435 and Front Street in Kansas City, Longview in Lee's Summit, Maple Woods in the Kansas City Northland, and Penn Valley in Kansas City's urban core. Approximately 19,500 students attend the five MCC campuses.

Facility Challenges

Facilities challenges at MCC are wide-ranging. Each MCC campus was constructed at a different time in the college's history, leading to varying levels of quality across campuses. Longview, Maple Woods, and Penn Valley campuses are the oldest of the campuses; Blue River and the Business and Technology campuses are newer.



Classroom condition varies widely across MCC campuses.

Classroom technology is not standardized across campuses and some campuses lack state-of-the-art equipment. Furnishings range from new and modern to older and dated. Computer labs are available to students on each campus.

Select programs on each campus are at capacity. Additional classrooms and parking are needed on the fastest-growing MCC campus, Blue River. More library space and staff offices are needed on the Longview campus. As allied health programs move into the new Health Sciences Institute, space will be

renovated for other programs on the Penn Valley campus. Additional parking is also needed on the Penn Valley campus.

Surveys are completed annually on facility components such as flooring, roofing, building exteriors, and interior finishes. Site facility components such as asphalt parking lots, concrete curbs, sidewalks, and parking garage structures are also evaluated annually. Management plans are in place but the college has a backlog of at least \$15.5 million in deferred maintenance. One of the largest issues for all campuses is maintaining the approximately 8,000 parking spaces owned by the college. The maintenance of concrete walkways is also an issue on some campuses.



Stamped concrete sidewalks are in need of repair.



Green roof on the Penn Valley campus.

The college strives to build all new facilities in an environmentally conscious manner. Energy conservation measures will likely be implemented on all campuses in the future. The Health Sciences Institute built in 2009 as an addition to the Penn Valley campus exhibits green architecture and technology. Green roofs can also be found on the Penn Valley campus.

Capital Priorities

Staff at the college use a formalized process to plan for campus renovations and improvements. Representatives of each campus regularly provide information about facilities needs to administrators, who then identify campus priorities. The following items represent MCC's top capital priorities for the future. The projects total about \$8 million.

1 • Homeland Security Regional Training Institute

*Project cost: \$2,800,000
(total request from state)*

The Blue River campus currently has considerable existing infrastructure to support its public safety institute (PSI), which is home to the college's police, fire, and EMT training academies. Support facilities include a 58-acre precision driving center, skid pad, and skills pad. In addition, a local fire department recently constructed a five-story steel burn building on campus for use by students.

Since 2001, homeland security has emerged as a new discipline encompassing public safety activities ranging from anti-terrorism to emergency management. Construction of a new homeland security regional training institute (HSRTI) would expand on the existing PSI infrastructure and provide facilities for comprehensive multi-discipline training scenarios. Groups like police, fire, EMT/EMS, public health, emergency management, private sector, non-governmental organizations, and others could be trained simultaneously on homeland security issues at the HSRTI. As the homeland security field grows, MCC would be able to provide new curricula and degree programs to the community. The cutting-edge facility would serve not only the metropolitan area of Kansas City but also the western region of Missouri, neighboring states, and even federal agencies.

The new HSRTI would add a military-operations-on-urban-terrain facility, a tactical shoot house, a multi-purpose high-ceiling metal building, and a mock emergency operations center to existing campus PSI infrastructure. The HSRTI would also offer an explosives range and reusable burn cells.



Students are currently trained on the emergency personnel equipment pictured above.



The new HSRTI would expand on existing campus infrastructure, which includes this precision driving course.

Capital Priorities, *continued*

2 • Green Automotive Technology Facility

*Project cost: \$2,500,000
(total request from state)*

The current automotive program on MCC's Longview campus is operating at capacity. Demand for both credit hour seats and contract training is growing. Especially with the increasing popularity of hybrid and alternative fuel vehicles, the demand for qualified automotive technicians with current skills is expected to grow. The proposed 12,000 square foot addition to the current automotive facility would provide four additional classrooms and laboratories. A green automotive technology facility would also help to eliminate crowded lab spaces, increase the institution's ability to offer additional credit classes, and improve the prospect for additional contract work.

3 • Pioneer Building and Roof Addition

*Project cost: \$2,500,000
(total request from state)*

The existing roof on the Pioneer Building on the Pioneer Campus is in poor condition. Indoor air quality and interior educational space will be negatively impacted if the roof fails. When the roof is replaced, MCC will also add a second floor to an existing two-story space in the Pioneer Building. College programs for workforce development, education, and community service would occupy the second floor space.



Automotive technology program equipment.



Student services building on the Blue River campus.



Interior atrium on the Penn Valley campus.

MINERAL AREA COLLEGE



Mineral Area's Park Hills campus.

The mission of Mineral Area College is to serve the community, to provide students a quality, affordable education, and to offer opportunities for professional and personal development.

Mineral Area is located in Park Hills. Its service area includes the communities of Farmington, Desloge, Bonne Terre, Leadington, Leadwood, Bismarck, and Fredericktown. About 3,700 students attend Mineral Area.

Facility Challenges

The Mineral Area campus is relatively new and in good condition. Most of its core buildings were built around the time the college was founded in the 1970s. Another sizeable group of buildings was added in the early 2000s. The buildings that were constructed in the 1970s have been well-maintained and updated. Only a few facilities stand out as in need of significant improvement or expansion. The college's Arts and Sciences Building needs to be expanded to accommodate student demand and workforce needs. Some of the labs housed in the Arts and Sciences Building are dated and do not meet student demand. In addition, Mineral Area's library has not been significantly renovated since it was built in 1971. Its appearance is very dated, and it does not have an elevator.



Many of the campus' labs are in need of updates.



The library is dated and without an elevator, which prevents access for some students.

Parking is a major challenge on campus. Although the college has a sizeable group of students who live on campus, the majority of students are "traditional" community college students who drive to campus to attend classes. The college recently added another parking lot, which will provide enough parking spots to meet student demand during the peak hours of 9 a.m. to 1 p.m.

Mineral Area also offers courses in Arcadia Valley, Farmington, Fredericktown, Perryville, Potosi, and Winona. The facility in Fredericktown was built in 2003, but it already needs more labs and classrooms to accommodate growing enrollment.

Capital Priorities

The following represent Mineral Area's top capital priorities for the future. The projects total \$25 million.

1 • Renovation and Expansion of Science Classrooms on the Main Campus

*Project cost: \$6,000,000
(total request from state)*

As previously indicated, the main campus of Mineral Area in Park Hills needs more science classrooms and labs. The Arts and Sciences Building currently houses science classrooms and labs. The building is over 40 years old, and many of the labs are over 30 years old. Both labs and classrooms are outdated and inadequate in number. This limits class offerings, preventing many students from obtaining the prerequisites they need to get into the nursing program and the general science courses required for the associate of arts degree. It also impacts the radiologic technology program, which is transitioning from a local hospital to the main campus. In addition, the State Board of Nursing has provided programmatic feedback to the college suggesting that they need to provide a dedicated space specifically for the nursing program.

2 • Additional Classrooms in Fredericktown

*Project cost: \$1,000,000
(total request from state)*

The Fredericktown Outreach Center was constructed in 2003. Due to increasing enrollment, however, it already needs additional classrooms and science labs. The proposed project includes the conversion of one classroom into a science lab and the addition of two classrooms.

3 • Construction of an Area Vocational Technical School

<i>State request from bond initiative or other source</i>	<i>\$9,000,000</i>
<i>State request from DESE</i>	<i>+ \$9,000,000</i>
<i>Total cost</i>	<i>\$18,000,000</i>

The area's current AVTS was constructed 35 years ago. Faculty and staff have identified age and space limitations as hindrances to their efforts to provide quality career and technical educational programs to the region. The center's equipment is also outdated; the kind of equipment needed for career training is different from the kind of equipment needed when the center was built. The problem isn't as simple as just not having up-to-date equipment – the building's current electrical systems are inadequate to support modern equipment because of newer equipment's utility requirements.



The gymnasium.



Mineral Area needs more space for science classes, which support programs such as nursing.

MOBERLY AREA COMMUNITY COLLEGE



The Main Building.

Moberly Area Community College, a public institution of higher education, provides open admission to students and fosters excellence in learning through innovative educational programs and services that are geographically and financially accessible throughout our service region.

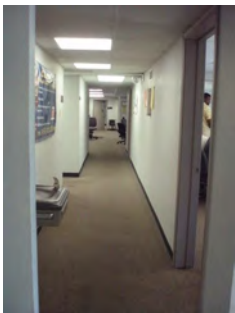
The main campus of Moberly Area Community College (MACC) is located in Moberly. The college has satellite campuses in Columbia, Edina, Hannibal, Kirksville, and Mexico. MACC also operates programs in Macon and at the Vandalia Prison. In total, the college serves 16 counties in northeast Missouri. This area includes the towns of Kirksville, Canton, Macon, Hannibal, Moberly, Mexico, and Columbia. Total enrollment is approximately 5,000 students.

Facility Challenges

The overall condition of MACC's facilities ranges from excellent to fair. Buildings on the main campus, such as the Andrew Komar Junior Hall and the Entrepreneurship and Business Development Center, are high-quality facilities. Andrew Komar Junior Hall houses several science laboratories for biology, physics, and chemistry, as well as multiple classrooms and lecture halls. Student services and various office spaces are also housed in the facility. The Entrepreneurship and Business Development Center, opened in 2009, provides superior-quality office space to support rural businesses and entrepreneurs. The center offers modern technology, resource rooms, offices, a conference room, and a training room.

Several of the MACC satellite campuses have experienced tremendous growth in the past 10 years. These enrollments, in addition to maintenance and repair issues on several campuses, characterize the biggest facility challenges faced by the college. Additionally, the college recently lost its leased facility in Hannibal, which has placed considerable stress on students, faculty, and staff as they make arrangements for continued instruction.

Enrollment on the Columbia campus has grown from 350 credit hours completed in 1999-2000 to nearly 27,000 completed in 2008-2009. The Hannibal campus has also experienced sizeable growth in enrollments from 36 credit hours completed in 1997-1998 to nearly 5,800 completed in 2008-2009. The Kirksville and Mexico campuses have experienced growth similar to that of the Hannibal campus.



Hallways in the Columbia facility are narrow and cramped — and often filled with students.

The Columbia campus is severely overcrowded. The condition of the building in which classes are currently held is fair. Hallways are tight and students are cramped throughout. Classroom space is a highly valuable commodity. Student soft spaces are minimal and overcrowded. Parking is a major challenge.

Several programs are at capacity on the main campus, while the associate of arts degree program is at capacity on both the Hannibal and Columbia campuses. Additional space, along with increased faculty and staff, would be required to expand programmatic capacity. MACC currently relies on hybrid, online, polycom, and virtual courses to increase capacity on all campuses.

The quality of instructional and support spaces at MACC varies. On the main campus, the Main Building is in need of several upgrades, including infrastructure and cosmetic improvements. Disability access issues need to be addressed and windows need to be replaced throughout. Electrical wiring for the building and the phone system are insufficient to support the college's modern



The Entrepreneurship and Business Development Center is housed in a restored historic building.

Facility Challenges, *continued*

technology needs. The Main Building does not have air conditioned hallways and many rooms still rely on window unit air conditioners. Also on the Moberly campus, the Career Center has a leaking roof that needs to be replaced. Parking areas on all campuses, and especially the main campus, need maintenance and repair.



Tiles show wear in the Main Building.

Capital Priorities

Staff at the college are working to develop a comprehensive facilities master plan, which will help manage immediate, short-, and long-term facilities needs at all campus sites. The following items represent MACC's top capital priorities for the future. The projects total about \$8.2 million.

1 • Hannibal Area Higher Education Center

<i>Request from state</i>	<i>\$2,000,000</i>
<i>College funds</i>	<i>\$1,000,000</i>
<i>Local support</i>	<i><u>+\$1,800,000</u></i>
<i>Total cost</i>	<i>\$4,800,000</i>

The college's facility in Hannibal serves degree-seeking students as well as non-credit students seeking business and industry training. Local A+ students also take advantage of the facility in Hannibal. MACC is the only public institution of higher education in the area. An expanded permanent facility would ensure that the college can meet the great student need that exists in the area.

The MACC Hannibal Area Higher Education Center would be a comprehensive 20,000 square foot facility housing classrooms, computer labs, science labs, faculty/staff offices, resource rooms, and student commons. Construction of this facility would save the college at least \$100,000 per year in leasing fees. Additionally, the new facility would provide space for increased enrollment.

2 • Career Center

<i>Request from state</i>	<i>\$190,000</i>
<i>College funds</i>	<i><u>+\$190,000</u></i>
<i>Total cost</i>	<i>\$380,000</i>

The career center, located on the main campus in Moberly, houses programs in business and office technology, early childhood, marketing/management, computer information systems, industrial electronics/electricity technology, drafting design technology, and industrial technology. Additionally, the career center houses a testing center, career and placement services, and the tech prep and school-to-work programs.

The original facility was built in 1972 and has been expanded twice, adding significant square footage each time. Water is entering the building through the walls and the roof. During renovation, the entire roof would be replaced and repairs made to exterior walls. Additionally, the outdated and inefficient heating and cooling systems in the building would be replaced.

3 • Main Building

Project cost: \$3,000,000
(total request from state)



Bathroom in the Main Building is outdated.

The Main Building on the Moberly campus is 127,472 square feet and includes the original structure from 1931 and subsequent additions. This building is home to a majority of the campus' general education programs as well as the law enforcement training center, learning center, adult literacy program, cafeteria, classrooms, and staff offices.

Repairs have been made continuously to the building as the college strives to maintain the structure. However, more renovations are necessary to ensure continued functionality. Wheelchair access to the building is an issue. Additionally, the electrical system in the building is not sufficient to support today's technology needs. The heating and cooling systems need to be replaced, as do windows throughout the building. Lastly, the library, cafeteria, and commons need cosmetic upgrades. Renovations to the Main Building would address each of these issues.

NORTH CENTRAL MISSOURI COLLEGE



Geyer Hall facade.

The mission of NCMC is to assist individuals in our educational/business community to attain their goals through open admission, reasonable costs, progressive curriculum and services—delivered by a caring, competent staff in a safe, technology-rich learning environment.

North Central Missouri College is located in Trenton. The college serves the towns of Maryville, Bethany, Trenton, Chillicothe, and Brookfield in a service area that extends into 16 northwest Missouri counties. Classes are offered on the main campus in Trenton, in addition to career center locations in Maryville, Chillicothe, and Bethany. Approximately 1,800 students attend the college.

Facility Challenges

The condition of facilities on North Central's campus varies. The newest building on campus, Cross Hall, is nearing completion. This state-of-the-art allied health facility will house several modern lecture facilities, simulation labs, general classrooms, faculty and staff offices, and sizeable common areas. Several allied health programs will be accommodated in the new facility including nursing, medical transcription, health information, biology, anatomy, and speech therapy.

With North Central's recent construction of Cross Hall, there is a great deal of movement among the buildings on campus. As the college makes adjustments to program locations, the biggest obstacle faced is the quality of space in Geyer Hall. This building is and will remain central to the accomplishment of the college's mission.

The nursing and allied health programs will soon move from Geyer to Cross Hall. Buildings currently housing the bookstore and the TRIO and academic resource programs are scheduled for demolition. Each of these buildings is old, small, inefficient, and not well-suited to its current use. When these buildings are demolished, the programs and the bookstore currently housed in them will be moved to the vacated space in Geyer Hall.

Geyer Hall houses a significant portion of the classrooms and support spaces on campus, and it has the lowest quality space of all the campus academic buildings. Student lounges and bathrooms in the building are uncomfortably small. Windows are older and inefficient. Many of the classrooms contain window unit air conditioners. The electrical, plumbing, and HVAC systems need to be replaced.



Many classrooms in Geyer Hall contain window unit air conditioners.



High quality computer labs are available to students on campus.

Buildings on North Central's campus are clean and well-maintained. Most classrooms have an adequate level of technology. Furniture is a mix of newer and older, depending on which campus building it is housed in. High-quality computer labs are available to students.

Capital Priorities

North Central Missouri College established a 10-15 year facility development plan and launched a capital campaign to pursue its former first priority, Cross Hall. In addition, North Central has a three-year strategic plan that utilizes both the facility development plan and systemic action plans toward specific objectives to reach its goals. The strategic planning team consists of over 60 individuals that reflect the diversity of their service region.

The following items represent North Central's top capital priorities for the future. The requests total about \$8 million.

1 • Renovation of Geyer Hall

<i>Request from state</i>	<i>\$3,165,000</i>
<i>College funds</i>	<i><u>± \$535,000</u></i>
<i>Total cost</i>	<i>\$3,700,000</i>

Historic Geyer Hall on North Central's main campus currently houses classrooms, academic programs, the media center, and the library. The TRIO and academic resource programs are also scheduled to move into Geyer Hall. Renovation will provide modern learning spaces and the ability to expand programmatic capacity.

The 32,000 square foot building is structurally sound but needs several infrastructure improvements. Renovations would replace electrical, plumbing, and HVAC systems. Classrooms would be remodeled, and inefficient windows would be replaced. These improvements are projected to reduce the building's utility costs by 30%.

As part of the renovation, the college would also install a new life safety system in Geyer Hall. New fiber optics would be installed, as well as fire-rated doors and a card access system.

2 • Barton Campus

<i>Request from state</i>	<i>\$3,400,000</i>
<i>College funds</i>	<i><u>± \$800,000</u></i>
<i>Total cost</i>	<i>\$4,200,000</i>

Located southeast of Trenton, the 130 acre Barton "green campus" would be designed to demonstrate sound agricultural practices for students and community partners throughout the region. Activities on the Barton Campus would demonstrate the use of wind, bio-fuel, and ground source energy in addition to capturing rainwater and recycling all resources. The campus would eventually be home to several new facilities, including an animal science building, a plant science building, a resource building, and a conservation demonstration building.



Cross Hall nearing completion.



Gymnasium in the Ketcham Community Center.

OZARKS TECHNICAL COMMUNITY COLLEGE



Information Commons.

The mission of Ozarks Technical Community College is to promote student learning through accessible, high quality, affordable workforce training, and technical and general education that is responsive to the educational needs of the community and its diverse constituencies.

The main campus of Ozarks Technical Community College (OTC) is located in Springfield. The college also operates the Richwood Valley campus in Ozark and educational centers in Branson, Lebanon, and Waynesville and the Center for Workforce Development in Springfield. In 2007, OTC began offering fine arts classes at the Gillioz Theater in downtown Springfield. The college's 14-county service area includes the communities of Springfield, Lebanon, Bolivar, Mountain Grove, Mansfield, Ava, Reeds Springs, and Branson. In total, nearly 13,000 students attend the college.

Facility Challenges

The overall quality of instructional and support spaces on OTC's campuses ranges from good to excellent. The two oldest buildings on the Springfield campus, Lincoln and Graff Halls, have been renovated within the past decade. The renovations have produced modern, high-quality facilities for students. Other facilities on campus have been constructed within the last 15 years.

Throughout the main campus in Springfield, furnishings are newer and buildings are well maintained. Technology is widely used on campus. Soft seating areas are available in several buildings on the main campus for students to study and congregate.

The new Richwood Valley campus, opened in 2007, is of excellent quality. The building houses student services functions in addition to several modern and highly technological classrooms and laboratories. Furnishings and building materials are state-of-the-art.



Formerly Lincoln High School, Lincoln Hall is on the National Register of Historic Places.



Richwood Valley houses state-of-the-art science facilities.

Rapid growth is the principal factor affecting facilities at OTC. Between 2004 and 2008, the institution averaged approximately 5.7% annual student growth. The addition of the Richwood Valley campus, the expansion of online courses, and the addition of education centers in Branson, Lebanon, and Waynesville have provided avenues for the college to meet increasing student demand for instruction, but the college continues to struggle to accommodate its growing student body.

The availability of instructional space is severely limited on the Springfield campus due to its landlocked location. Classrooms are heavily utilized during peak times and several programs are operating

at capacity. Specifically, allied health programs are at capacity and some programs have been relocated to the new Richwood Valley campus to allow for program growth. Because of the need for nursing professionals in Springfield, the newly created associate degree nursing program is already facing demands for expansion.

Parking is also a critical issue on the Springfield campus. With classroom utilization rates between 80 and 90% during peak hours, up to 3,800 students, faculty, and staff can be on campus at any given time. Currently, there are only 2,199 parking spaces and no additional overflow parking outside campus boundaries.

Maintenance and repair issues on the Springfield and Richwood Valley campuses are minimal. Concrete failures that were visible in various places on campus have been corrected.

Capital Priorities

In 2007, the college formed a facility needs committee to explore potential expansion opportunities on the Springfield campus. After a nine-month study, a committee consultant presented a report, which recommended \$75 million in capital improvement projects. These projects are expected to equip the college for sustained growth during the next 10-15 years. The recommendations have become part of the campus master plan and the strategic plan. The college's capital priorities will allow the college to continue to promote a learning-centered environment focused on accessible, high-quality, affordable workforce training, technical education, and general education.

The following items represent OTC's top capital priorities for the future. The total cost of the projects is \$29 million.

1 • Career Training Center

Request from state \$10,500,000

College funds + \$6,500,000

Total cost \$17,000,000

A career training center would provide much-needed classroom space for general education classes that are required for the associate of arts transfer degree, the associate of science degree, and various technical certificates. Courses offered will include math, communications, foreign language, biology, chemistry, and other sciences.

The center will be a 70,000 square foot facility housing new classrooms and student-oriented space. The project will require the relocation and addition of parking to an area north of the existing campus. Without this addition of classrooms and parking spaces, enrollment growth on the Springfield campus will be restricted.

2 • Student and Workforce Support Center

Project cost: \$12,000,000

(total request from state)

The construction of this 70,000 square foot facility would provide space for new classrooms and an auditorium for college events and presentations. Administrative offices and the student services department would also be in this facility. By relocating these services, space will be available in the Information Commons, Information Commons East, and Information Commons West to provide centrally located classrooms for students. The project will also require the relocation and addition of parking to an area north of the existing campus.



The atrium of the new Richwood Valley facility.



Student seating on the Springfield campus.

ST. CHARLES COMMUNITY COLLEGE



The Learning Resource Center.

SCC enriches our community by providing life-changing educational and cultural opportunities focused on personal growth and student success in a global society.

St. Charles Community College (SCC) is located in Cottleville and serves four Missouri counties. St. Charles, St. Peters, O'Fallon, Wentzville, and Lake St. Louis are all part of the SCC service area. Approximately 7,800 students attend the college.

Facility Challenges

Facilities on SCC's campus are relatively new, in good condition, and well equipped to ensure that the college meets its mission. The overall quality of instructional space is excellent; classrooms are spacious and instructional technology is available to instructors in nearly every classroom. Furnishings are modern and in good condition. Several large computer labs on campus are available to students.

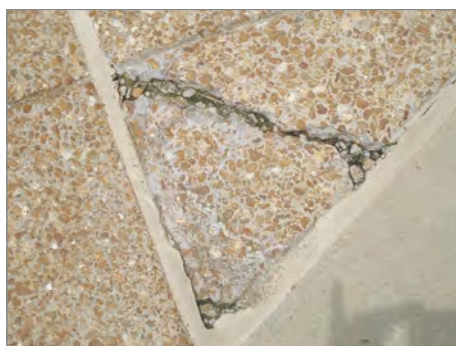
The college is committed to environmental sustainability. Facilities projects on campus are intended to demonstrate that commitment. In the summer of 2009, the campus underwent an assessment to determine what steps could be taken to make the college more sustainable. As funding becomes available, the college will be able to implement improvements.

Certain programs on campus are at capacity, including science, nursing, and allied health programs, which rely heavily on science laboratory facilities. The need for specialized lab space is one of the most critical issues on campus, as student demand continues to grow in each of these areas. The amount of existing lab space and equipment available on campus is not adequate to meet the needs in these science-based programs.



The nursing lab is crowded with life-size simulators.

Aging roofs are also an issue on campus. Buildings from the first phase of campus development are nearing 20 years of age and are due for replacement. In some cases, water infiltration results from failing roofs. Water can be found in ponds on certain roofs and roofing materials are shrinking and separating at the seams. Some roofs have been patched, but continue to cause water infiltration problems.



Various sidewalks and walkways exhibit signs of failure.

Additionally, failing concrete causes problems in various areas on campus. Curb cement is eroding, sidewalks are cracking, and there is general deterioration of concrete. Failures in concrete create tripping hazards and dangerous conditions for all students – particularly those with disabilities.

Capital Priorities

Staff at the college operate from a facilities plan. Each year SCC staff complete a comprehensive planning process to assess strategic opportunities campus-wide. Priorities are identified and matched with available funding. Since 1987, when the college was established, facilities have been constructed in phases, the most recent of which was completed in 2006. SCC has now made facility upgrades and renovations a top priority. The following items represent SCC's top capital priorities for the future. The projects total about \$10.2 million.

1 • Life Sciences Facility

<i>Request from state</i>	<i>\$7,522,500</i>
<i>College funds</i>	<i><u>+ \$1,327,500</u></i>
<i>Total cost</i>	<i>\$8,850,000</i>

Student demand for additional sections of science and health-related courses continues to grow each year. Current campus facilities, including laboratories, do not meet the growing needs. A new life sciences facility on campus would consolidate the science and allied health programs into a modern building with enhanced classrooms and laboratories.

2 • Classroom, Lab, Theater, and Studio Enhancements

<i>Request from state</i>	<i>\$376,000</i>
<i>College funds</i>	<i><u>+ \$94,000</u></i>
<i>Total cost</i>	<i>\$470,000</i>

This project would upgrade current classroom, lab, theater, and studio facilities to include a standardized technology suite. SCC staff indicate that this would prepare students for the technology they will use in the workplace and at institutions to which they transfer.

3 • Roof Replacements

<i>Request from state</i>	<i>\$720,000</i>
<i>College funds</i>	<i><u>+ \$180,000</u></i>
<i>Total cost</i>	<i>\$900,000</i>

This project would replace older roofs from Phase I buildings, including the Administration Building, Student Center, Learning Resource Center, and Campus Services Building. These buildings were opened in 1992. Numerous minor repairs over the years have kept these roofs intact, however the extent of wear now requires replacement. New roof materials will be environmentally friendly and will assist in SCC's efforts to be as energy efficient as possible.



Student soft space on campus.



Certain classrooms contain superior technology.

ST. LOUIS COMMUNITY COLLEGE



Sign on the Florissant Valley campus.

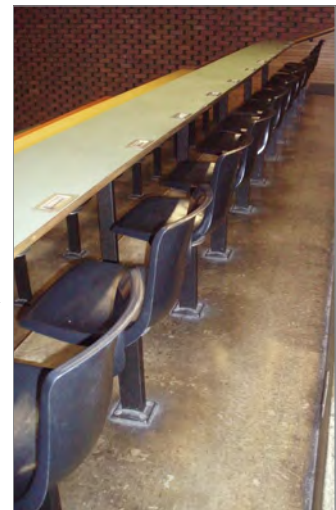
St. Louis Community College expands minds and changes lives every day. We create accessible, dynamic learning environments focused on the needs of our diverse communities.

St. Louis Community College (STLCC) serves the city of St. Louis, St. Louis County, and portions of Jefferson and Franklin counties, with four regional campuses and several learning center locations. The Florissant Valley campus is located in Ferguson in north St. Louis County. The Forest Park campus is located in west St. Louis City. The Meramec campus is in Kirkwood, and the Wildwood Campus is in west St. Louis County. STLCC's education centers include the Downtown Education Center, South County Education and University Center, and the William J. Harrison Northside Education Center. Total enrollment at the college is approximately 28,000 students.

Facility Challenges

The varying ages of buildings on STLCC's campuses create a wide variety of facilities and maintenance challenges. Construction on the first three STLCC campuses, Florissant Valley, Forest Park, and Meramec, occurred between 1965 and 1972. The South County Education and University Center was constructed in 2003. The Wildwood campus served its first students in 2007. In 2009, the college broke ground for its newest learning facility, the Harrison Education Center, replacing a leased facility.

The overall condition of facilities on the Florissant Valley, Forest Park, and Meramec campuses is good, with buildings ranging from fair to excellent condition. Several buildings are original construction. The college has, however, made some upgrades and additions, as well as constructing completely new facilities. Older buildings are clean and well maintained. Upgrades and/or additions frequently carry the added expense of asbestos abatement in total project cost. The college maintains a six-year maintenance and repair plan and invests \$5 million annually in facility maintenance and repair.



Student seating is attached to the floor in an outdated yet still widely used lecture hall.

STLCC recently conducted a study to assess the capacity of buildings on all campuses and found that much of the space was over 90% utilized during peak times. The college has employed creative scheduling techniques to increase capacity in high-demand courses. In addition, the college offers weekend, online, hybrid, and ITV courses.



Technology is not easily added in older facilities.

Nursing programs across the district are operating at capacity and allied health programs on the Forest Park campus are also at capacity. There are too few science labs to educate allied health students. The Forest Park campus is surrounded by major health centers and is one of the area's largest providers of trained allied health professionals in fields such as mammography. In addition, the campus offers health technology training, including programs ranging from funeral services to dental hygiene to nursing.

Although one-third of the college's science labs have been updated with funds from the Lewis and Clark Discovery Initiative, the remaining two-thirds of the science labs on the three older campuses remain outdated. Additionally, several classrooms still contain tablet style desks and have limited technology. Modern technology is not easily integrated into older campus facilities.

Facility Challenges, *continued*

Most of the maintenance and repair issues on the older campuses stem from the overall age of the facilities. Electrical and HVAC systems are overburdened as the systems strive to keep up with the installation of new technology. It is difficult to add wireless internet to the older buildings because of their layout and construction material.

The roofs on many buildings on the three older campuses are past their expected life span and are due for replacement. Some older buildings have not been brought into full ADA compliance. Elevators are old and unreliable. The longevity of the current telephone system is also a concern for college administrators. The college operates nearly 5,000 telephones on a six-switch system.

STLCC at Wildwood is the first “green” campus in Missouri. The campus was built with environmentally friendly materials and was designed to enhance occupant comfort and health, reduce operating costs, conserve natural resources and reduce each building’s impact on the environment. College staff frequently use sustainable and/or LEED-based approaches to managing facilities on all campuses.



Aging and damaged roofs are in desperate need of replacement.

Capital Priorities

The college makes decisions regarding facilities based on the district-wide facilities plan, which supports the college’s strategic plan. Projects are prioritized into three tiers and priorities for each campus are clearly outlined. The following items represent St. Louis Community College’s top capital priorities for the future. The projects total \$38 million.

1 • Science Lab Renovation

<i>Request from state</i>	<i>\$7,000,000</i>
<i>Federal funds</i>	<i><u>± \$3,000,000</u></i>
<i>Total cost</i>	<i>\$10,000,000</i>

The college serves approximately 12,000 students a year in largely outdated science labs. On the college’s three older campuses, there are 45 science laboratories that were built in the 1960s. Only 15 of these labs have been recently updated. In the remaining 30 labs, several issues need to be addressed. Current facilities are not ADA compliant. The laboratories use outdated equipment, which limits student learning. The laboratories are not appropriate for modern scientific instruction. They are also energy inefficient.



Outdated science facilities are inflexible, inefficient and ill-equipped to meet today’s standards.

Renovations will include new finishes for the walls, floors, and ceilings, as well as new casework, counters, storage cabinets, whiteboards, and projection screens. All associated mechanical, plumbing, and electrical updates will be addressed, including new fume hoods, sinks, gas, and electrical outlets. Additionally, the renovation will enhance student learning by providing an infusion of technology into the laboratory environment. The updated labs will be multipurpose and available to serve students in physics, chemistry, physical sciences, astronomy, geology, and biology.

Capital Priorities, *continued*

2 • Elevator and Roof Repair

Request from state \$11,500,000

Federal funds +\$1,500,000

Total cost \$13,000,000

As the age of the three older campuses approaches 40, the elevators and lift units have become a reliability and life safety issue. The college has addressed the aging elevators as quickly as possible, and has even taken extra safety precautions such as providing life jackets to arrest a fall in the event of an elevator failure. However, code requirements have changed drastically in recent years and the college has not had the resources to upgrade every unit. Failure to comply with the elevator improvements could limit elevator service as well as restrict access to some specialized instructional spaces located on the upper floors of a building including labs, studios, and library services.

STLCC currently operates under 18.3 acres of roof. Although the roofs on the three older campuses have been replaced once since their initial construction, life expectancy is only 20 years and it is time again for replacement. Inadequate and failing roofs cause leaks that disrupt classes and pose reliability issues for the college. This project would modernize 27 elevators and replace 26 roofs across the three older STLCC campuses.

3 • Workforce Development Center

Request from state \$10,000,000

Federal funds +\$5,000,000

Total cost \$15,000,000

The workforce development center would focus specifically on employers' need to respond to new economic challenges by providing quick-start training for new workers, just-in-time upgrade training for existing workers, industry-based certification training, and pre-employment training for in-demand occupations. The center would help dislocated workers become rapidly re-attached to the job market as an alternative to enrolling in a multi-year educational process. Cutting-edge employee training would also be available for existing and prospective companies in rapidly expanding new markets such as sustainable energy or transportation/logistics.

With capital funds, the college would acquire, rehabilitate, and repurpose a declined industrial/manufacturing facility in northwest St. Louis near several large corporate employers. The workforce development center would provide 60,000-90,000 square feet of space for industrial, technical, and business training.



Lab upgrades made with LDCI funds.



Technical lab on the Florissant Valley campus.

STATE FAIR COMMUNITY COLLEGE



State Fair Community College.

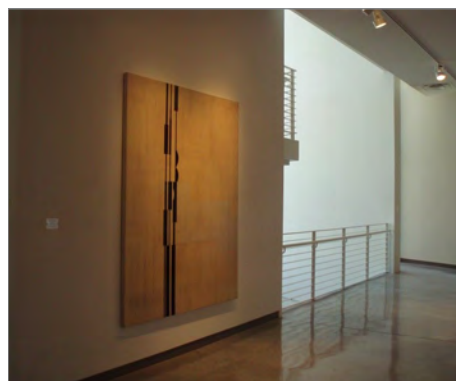
State Fair Community College is an accessible, learning-centered institution, enriching its students and community by providing skills, knowledge and perspectives essential for a changing world.

The main campus of State Fair Community College is located in Sedalia. Extended campus sites are located in Boonville, Carrollton, Clinton, Lake of the Ozarks, Marshall, Versailles, Warsaw, and on Whiteman Air Force Base. Additionally, the college serves students at 20 other off-campus sites. State Fair's service area extends into 14 central Missouri counties and includes the communities of Boonville, Camdenton, Carrollton, Clinton, Eldon, Harrisonville, Jefferson City, Knob Noster, Marshall, and Warrensburg. Total enrollment is approximately 4,300 students.

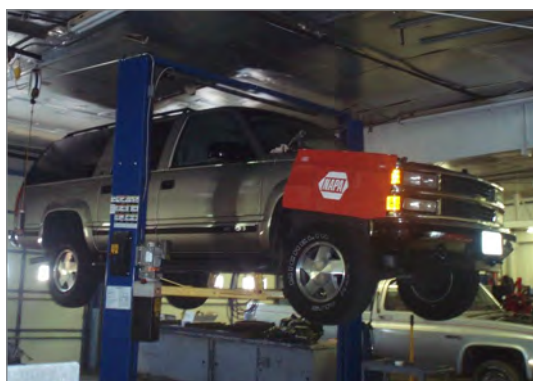
Facility Challenges

The instructional and support facilities on State Fair's campus are in varying condition. The campus is home to the ultra-modern Daum Museum of Modern Art, which connects to the Stauffacher Center for the Fine Arts. The museum collects, preserves, interprets, and exhibits modern and contemporary works of art and design for the educational enrichment of students, faculty, and the general public. Additionally, sculptures and other art pieces are displayed throughout campus.

State Fair faces challenges meeting student demand and workforce needs in some programs. Automotive, welding, and other career and technical programs are currently operating at capacity. The equipment used by the automotive and welding programs will need additional space in order for these programs to grow. Adequate space to meet safety requirements is also a consideration for the college. The need for renovated and upgraded facilities, in addition to more funding and faculty, restricts the expansion of these programs.



A wide variety of art, including paintings, is displayed in the ultra-modern Daum Museum of Modern Art.



Elevated vehicles nearly touch the ceiling in the current automotive facility.

The quality of space inside instructional facilities is good. A standardized technology suite is available in many classrooms. Furnishings in classrooms are newer or in good condition. Some spaces on campus have been renovated or remodeled to accommodate growing programs. Computer labs are widely available.

The majority of State Fair's enrollment growth is occurring on the satellite campuses and online. While this does not contribute to overcrowding on the Sedalia campus' physical plant, it does place a strain on the college's resources.

Capital Priorities

Staff at State Fair use a master plan to address student instructional and service support needs in the context of facilities. Program capacity and requirements are the major factors in setting priorities for capital improvements. The following items represent State Fair's top capital priorities for the future. The projects total about \$15.6 million.

1 • Automotive Technology Center

*Project cost: \$6,220,000
(total request from state)*

Automotive technology programs are in high demand at State Fair. Originally designed as a temporary auto body shop, the current automotive technology facility is insufficient to meet the needs of the growing program. Surplus space is non-existent. Neither the auto shop nor the small classroom space available in the current facility is sufficient for the learning environment, which is used by secondary and postsecondary students. Ceilings in the building are low, making it difficult for students to work underneath vehicles. Tool storage space is inadequate. Interference from the elements is also a problem. During warm weather, the building is too hot to accommodate instruction comfortably. During rainy weather, the sound of rain on the metal roof is too loud for students to hear their instructors.

The construction of a new 34,500 square foot facility would expand the capacity of the automotive technology program and would allow for instruction in alternative energy vehicles. Two classrooms, 12 car bays, tool storage areas, and faculty offices along with auto body and collision and welding technology will be included in the new building.

2 • Truman Regional Education Center Phase II

*Request from state \$1,050,000
College funds + fundraising underway
Total cost \$1,050,000*

Enrollment at the Truman Regional Education Center (TREC), which is located in Clinton, increased nearly 50% in FY 2009. When the second phase of the renovation to the TREC is complete, State Fair will be able to offer more general education classes, in addition to science, nursing, and allied health classes. Approximately 6,000 square feet would be renovated to accommodate a chemistry lab, lab prep area, two classrooms, restrooms, and a custodial room.

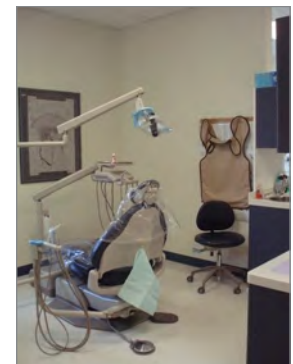
3 • Commercialization and Training Site—Missouri Center for Waste to Energy

*Request from state \$7,300,000
Partnership funds + \$1,000,000
Total cost \$8,300,000*

State Fair, in partnership with other public and private entities, plans to build a major development, commercialization, and training site focused on technologies related to the conversion of waste materials into usable energy sources. The Missouri Center for Waste Energy would also provide training and education opportunities for students in biology, chemistry, welding, math, physics, and agriculture programs. Additionally, the center would have a great impact on the college in the form of reduced utility costs because of energy generated by the center.



Campus sculptures.



Dental hygiene program equipment.

THREE RIVERS COMMUNITY COLLEGE



Distance Learning Center.

Three Rivers Community College provides quality, accessible and affordable learning opportunities and services for academic scholarship and professional success.

The main campus of Three Rivers Community College is located in Poplar Bluff. The college's service area includes portions of 17 southeast Missouri counties and includes the communities of West Plains, Cape Girardeau, Dexter, Sikeston, New Madrid, Malden, Kennett, and Hayti. In addition to the main campus, Three Rivers operates in-district centers in Doniphan, Piedmont, and Van Buren, and full-service centers in Campbell, Kennett, Malden, Portageville, and Sikeston. Approximately 3,500 students attend classes at Three Rivers.

Facility Challenges

Growing enrollments, current campus design, and maintenance and repair issues constitute Three Rivers' primary facilities challenges. Over the past three years, the college has experienced consistent growth in student headcount and credit hour production, resulting in greater demand for classroom space, labs, and facilities. Classrooms are utilized at capacity in the morning and evening hours. Additional classes have been added during non-peak hours to accommodate additional periods of instruction.

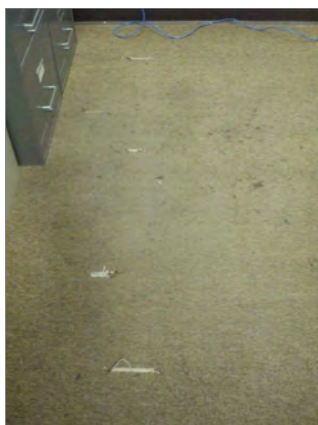
Biological and physical science classes frequently reach capacity. Three Rivers recently added evening nursing classes and an LPN-to-RN bridge program, which effectively doubled the size of the nursing program. Demand continues to exceed supply, however, and current facilities available for these science-based programs are not adequate to meet student demand and workforce needs.

A cluster of student services functions in the Bess Student Center building is very short on space. Students crowd the hallways and offices waiting for assistance. Minimal privacy is available for handling confidential student conversations.

Campus buildings are spread out over 80 hilly, wooded acres, which is a relatively large amount of space for the number of buildings on campus. This layout affects instructional and student support functions on campus. Several core student services functions are housed in different buildings on campus, which may be separated by a considerable distance. Additionally, the layout of the library building awkwardly splits both the library and the career technical programs in the building.



Crowded storage area is indicative of the lack of space for the nursing program.



Carpet in the Rutland Library is badly worn.

The campus faces a range of maintenance and repair issues. Some facilities have roofs with recurring leaks. Several restrooms on campus have not been brought into compliance with ADA provisions. Deteriorating parking lot surfaces need to be repaired and recoated, and miscellaneous repairs are needed in different buildings. Proper airflow is an issue in buildings that have been remodeled. The carpet and furnishings in the Rutland Library pose potential safety risks for the school. The carpet is badly worn in several areas, and library stacks are overloaded with books to the point that the shelves are bowed and threaten to collapse.

Overall, however, the quality of instructional space on Three Rivers' campus is good. The college is aiming for 80% of its classrooms to be "master classrooms" in which there is a complete suite of technology available for instruction. Furnishings in buildings are adequate and facilities are clean with minor visible wear and tear. Computer labs are available on campus, as well as several soft spaces for students to gather.

Capital Priorities

Three Rivers engages in a systematic, broad-based, interrelated strategic and operational planning system. A strategic planning steering committee, comprised of representatives from throughout the college community, annually establishes the priorities for all college functions, facilities, programs, and services, under the direction and leadership of the college president. Additionally, this committee monitors the college's three-year strategic plan to ensure that priorities are congruent with local, state, and national priorities and that progress is made toward attainment of the plan's measurable objectives. The following items represent Three Rivers' top capital priorities for the future. The projects total about \$13 million.

1 • Health Sciences and Simulations Training Center

<i>Request from state</i>	<i>\$5,948,980</i>
<i>Federal funds</i>	<i><u>± \$661,998</u></i>
<i>Total cost</i>	<i>\$6,610,978</i>

The current space available for nursing and allied health education on campus is extremely limited. This factor, along with lack of clinical facilities, limits total enrollment in the nursing program. With the addition of a health sciences education and simulations training center, Three Rivers would be able to increase the number of nursing and medical lab technician graduates and bring more allied health programs to the area. The proposed facility is nearly 23,000 square feet and would house a simulations lab, several classrooms, four science labs, offices, and a reception center.

2 • Student Academic Success Center

<i>Request from state</i>	<i>\$3,417,705</i>
<i>College funds</i>	<i><u>± \$379,745</u></i>
<i>Total cost</i>	<i>\$3,797,450</i>

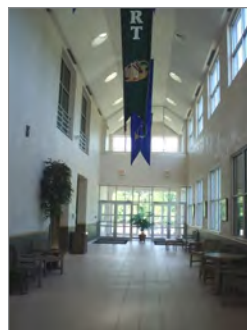
Currently, student services are spread out in various facilities on the 80-acre main campus of Three Rivers. When trying to complete simple registration tasks, a student can be forced to visit multiple buildings on campus. The construction of a student academic success center would bring together the core student functions on campus. The 20,000 square foot facility would house all student services, including testing, advising, registration, retention assistance, tutoring, the bookstore, and financial aid. The center would also house a welcome center, offices, conference rooms, display and storage spaces, and the TRCC police department.

3 • Rutland Library/Academic Support Services Center

<i>Request from state</i>	<i>\$1,191,750</i>
<i>College funds</i>	<i><u>± \$1,191,750</u></i>
<i>Total cost</i>	<i>\$2,383,500</i>

In its existing form, the Rutland Library Building is not optimally configured. One side of the building houses the library on two floors. There is no way to pass between the two floors without actually leaving the library. The other side of the building houses various career and technical programs. There, too, travel between classrooms, labs, and other academic space is hindered by the lack of direct passage between the two.

The renovation and remodel of the 23,000 square foot building would create upgraded, separate, and comprehensive spaces for the library and academic support services. Additionally, the project would address accessibility issues for students with disabilities and improve overall efficiency in the building through a reduction in staff and the elimination of duplication of resources. Safety and security in the building would also be improved.



Inside the Tinnin Fine Arts Center.



Student center cafeteria.

